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THE

AMERICAN PRACTITIONER AND NEWS:

A BI-WEEKLY JOURNAL OF

MEDICINE AND SURGERY.

"Nec Tenui Penna."

D. W. YANDELL, M. D., AND H. A. COTTELL, M. D., EDITORS.

VOLUMES IX AND X—1890.



LOUISVILLE, KY.

JOHN P. MORTON AND COMPANY, PUBLISHERS.

1890

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THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., JANUARY 4, 1890.

No. 1.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

SCROFULA AMONG THE SIOUX INDIANS; ITS ORIGIN AND NATURE.*

BY JOSEPH B. GRAHAM, M. D.
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The excessive disproportionate number of scrofulous cases found among the Indians is enough to incite any one who has to deal with them to an investigation of the cause and nature of the disease.

Though this investigation is as yet superficial, I trust it may appear none the less interesting. The halo of romance which once surrounded the native American has, like Hiawatha and others noted in poetry and song, with their native food, the buffalo, faded from earth and passed to the kingdom of the hereafter. The Indian is now relegated to the realms of a common every-day being. As such I propose to deal with him, and learn what I can from the opportunities presented.

During the time (not yet two years) that I have been physician to this agency I have had under treatment thirty-two cases of scrofula in its gravest form. Those who have never been under treatment by actual count (with a less aggravated appearance of the disease) number two hundred and five, mostly under eighteen years of age. This is among a population of less than thirteen hundred souls.

The varied forms of the disease may be

met with daily in tubercloses of lungs, membranes of the brain, mesenteric glands, peritoneum, joints, periosteum, lymphatic glands, muscle, bones, tendon, and tubercular ulcerations of intestines. Fully eighty per cent of all the diseases found among them are tuberculous in character, and tuberculosis threatens in time to exterminate the race if some steps are not taken to stay its ravages.

In this connection it would not be out of place to trace the relationship between scrofulosis and tuberculosis, as it has a direct bearing upon the subject. However, I shall not attempt a description of tubercle or definition of what has been termed scrofula.

The history of the disease among the Indians is tuberculosis in the parent, in the infant and child so-called scrofulosis and tuberculosis, and in the prime and "sere and yellow leaf of life" again tuberculosis. What are the connections? Virchow regarded tuberculosis as a possible heteroplastic or metastatic scrofula. Wagner and Schuppel discovered that in many instances scrofulous glands were tuberculous. Rindfleisch looked upon tuberculosis and scrofulosis as identical. Villemin inoculated animals with the sputa from consumptives, and it always produced tuberculosis, and with matter from scrofulous glands, also causing tuberculosis. Kanzler has found Koch's tubercle bacilli in local scrofulous affections. Until recently scrofula and tuberculosis were considered distinct, yet often co-existent diseases, and the theories for and against unity are too numerous to be included in a paper of this kind. However, it has been satisfactorily proven that scrofula is only a local tuberculosis, and as much due to decay of cellular structure caused by the invasion, growth,

*Extract from a paper read before the Dakota Medical Society, June 22, 1889.

and harmful influences of Koch's tubercle bacilli as is miliary tuberculosis of the lungs. To illustrate their unity I may cite the following, which is only a sample of many other such cases.

A mother under observation has resulting cicatrices from former scrofulous glands. Dullness on percussio was found over apex of right lung, with history of hemorrhages. The oldest daughter, aged fourteen, had cheesy and ulcerating glands of the neck and kyphosis, and has since lately died of acute miliary tuberculosis of the lungs. The second child, a girl eleven years old, in a rigid physical examination failed to show a departure from health, was stricken with tubercular meningitis and died. A baby girl aged two years succumbed to *tubercles mesenterica*. A sister and the father of the aforesaid mother died of consumption; measles prepared the way for consumption in one, and scrofula in two immediate relatives. The husband, without a history of violence or disease of the parts, was attacked with orchitis which resisted treatment and was diagnosed tubercular testicle.

From the fact that tubercle bacilli are almost invariably found in what is termed scrofulous glands, joints, and bones, many of those affected with so-called scrofulosis are in reality victims of tuberculosis.

Supposed Syphilitic Origin. History records little and tradition is uncertain—at least what can be gained from them—regarding the early existence of syphilis among these Indians. However, it is claimed to have existed among them in the form of an epidemic lately by some, and from the earliest time by others. So, also, was it the accepted belief by many of the laity as well as profession that their scrofula was due immediately to some change or slightly altered tertiary form of the syphilitic virus brought about by transmission from generation to generation. Able and scientific authorities have held this theory.

It can not be proven that syphilis existed among the Indians before the advent of the whites, though we are familiar with the theory advanced by Leonard Schmans and

others (from 1518 to 1521) of the American origin of the disease.

Prof. Joseph Jones has found what were pronounced syphilitic bones in the ancient mounds of the southern States, but ethnologists and scientists, among them Parot, according to Broca, have found very ancient syphilitic bones in the Old World. St. John also found syphilitic bones in America. Syphilis can not be traced from these evident prehistoric races to the Indian of to-day, though an identity in race is claimed by some.

The older Indians and their traditions say that scrofula, syphilis, and consumption were little or almost unknown among them until within the last fifty years. Alex. Rencountre, whose observation among them covers half a century, and is entitled to credit, says the first case of syphilis he saw or heard of among them was in 1867. However, in 1858 he saw a case in the Yankton tribe of Sioux.

The Medical Analectic, November 1, 1888, contains an article from the Medical Press, August 22, 1888, on "Syphilis and Tuberculosis among the American Indians," which says: "During the past five years but very little primary syphilis has occurred among the Indians. It would seem that the Indian woman was no longer susceptible to the contagion of syphilis, for all other forms of venereal disease have been of late years very prevalent among them. Previous to forty years ago syphilis among the Indians was a very rare disease, but about that time it became epidemic, and hardly a family escaped the ravages. It is possible that the disease has become so incorporated into the blood of the race that each new generation is protected as by inoculation. In place of syphilis scrofula and tuberculosis seem to flourish, and to-day they are the most frightful causes of death among them. It seems very probable that tubercular disease may originate from syphilis in preceding generations."

While this in part may hold true of other Indians, it will not apply to the Sioux or Dakotas, for if syphilis came among them as late as forty years ago, there would un-

doubtedly be some tertiary symptoms in the older people, and some hereditary symptoms among the younger, at least in some of its forms. From an observation of several thousand Indians, both personal and by letter from other agency physicians in the Sioux service, I find that syphilis in any form is almost a rare disease. I have not seen a case of hereditary syphilis, Hutchinson's notched teeth, or the peculiar appearance described by him. True, the lymphatic glands of the groin and arm-pits often are found enlarged or ulcerated, but, in absence of any history of primary lesion and without any syphilitic symptoms, I am led to class them as scrofula or local tuberculosis, though without close study and history of the patient one would be inclined to call such cases syphilitic. This mistake I have seen made by the profession.

"Syphilis is always transmitted as syphilis," though the cachexia induced by the disease predisposes children to scrofulous affections. Hutchinson says that "hereditary syphilis does not predispose to scrofulous nor tubercular affections."

As regards the transmission of syphilis itself, "it is almost an acknowledged law that parents in the late tertiary stages do not transmit taint. It is certainly the rule that when parents have fully reached the tertiary stage that children born to them are free from all signs of syphilis." The demonstration of the bacillus of syphilis by Dr. Lutzgarten, in Weigert's laboratory at Leipsic, and also the study of it by Marcus and Tornéry, shows a distinction between the bacilli of the two diseases. If Lutzgarten's bacillus prove as true of syphilis as Koch's has of tuberculosis, no relationship can exist between the two diseases.

"Syphilis is a distinct disease and can only be reproduced as syphilis," but by lessening resistance and lowering vitality syphilis may predispose an individual to tuberculosis when placed under favorable conditions to contract the disease, or, in other words, when exposed to an atmosphere containing tubercle bacilli, or by eating the meat and drinking milk of tuberculous animals.

Furthermore, it is a well-known fact that syphilis protects an individual and his offspring from future attacks, and the tendency of the disease is to die out. As tuberculosis appears among them the disease is alarmingly on the increase, and the tendency of the disease is toward death in the individual affected.

Acquired Origin. In the nomad and uncivilized state the principal diet of the Dakotas was buffalo meat, the supply of which, only in exceptional times, was very plentiful. Their "tipis" were made of buffalo skins, were well ventilated and offered ample protection from the weather. Their clothing of the same material was sufficient for their needs. How do we find the Indian of to-day? Instead of the comfortable skin tipi, they now inhabit one of unbleached cotton which offers no protection from the cold of winter or dampness of the rainy season. Or to the other extreme, a log cabin with dirt floor, which is plastered till almost air tight. Light is admitted through a single window without any ventilation whatever. These houses are kept in winter at a temperature from eighty to ninety degrees Fahrenheit, and inside are practically dry at all times. Exhalations from persons and dogs, with sputa from consumptives and pus from scrofulous sores are allowed to lodge on the walls and dirt floors. They are rapidly dried by the high temperature and suspended in the atmosphere of the room. Thus it may be seen that these houses are the very gravest source of danger, veritable culture soils and hot-beds, they furnish the best possible condition for the spread of tuberculosis when the bacilli lodge in the soil prepared for them by exposure, underfeeding, and malnutrition. Not only is death lurking in the air of these places, but as the raw beef sliced is hung there to dry in winter, tubercle bacilli or spores may lodge on the beef, and, as this is often eaten raw, another most formidable source of danger to others and of self infection presents itself.

According to Alex. Renconntre and others, the first case of scrofula (particularly)

noticed among the Brulé Sioux occurred in 1869. Beef cattle were first delivered to these Indians in 1868, and from that period the ascendancy of tuberculosis is marked. I do not think the case referred to as occurring in 1868 was the first case of scrofula among them, but it certainly did not exist to an alarming extent before that time. Eminent observers have called attention to the great dangers arising from the use of meat from tuberculous animals. Among these observers I may cite M. Nocart, of Alfort. Cats and dogs fed on tuberculous meat have been demonstrated to have acquired tuberculosis. Liegan, of Luxembourg, has tuberculized hogs in the same manner. Guinard, of Dijon, condemns the custom of anemic patients resorting to abattoirs to drink the blood of animals just killed. Villemin has demonstrated the close relationship between pearly distemper or bovine tuberculosis and human tuberculosis. Without quoting other authorities, it seems plain enough that the meat of tuberculous animals, when eaten raw, constitutes a serious source of infection. I can not say with certainty that any of these cattle devoured by them were tuberculous, but merely cite it as a possible source of infection. Knowing the prevalence of the disease among cattle, it is only reasonable to suppose that among the many hundred head of cattle the Sioux have consumed, some were tuberculous. I have often seen them devouring with avidity the raw livers, kidneys, and other abdominal viscera of cattle just killed. Bacon or pork has been regarded by the laity, as well as by the profession, as a possible etiological factor in the production of scrofulosis with evident injustice, unless it is from tuberculous hogs and contains the bacilli of tuberculosis. However, continual consumption of it may cause scurvy. The principal article of diet of the colored people in the South (among whom I have had some observation) is hoe-cake, bacon, and hominy, yet they are not threatened any more seriously than the whites by tuberculosis. They, however, live in better ventilated apartments (they could not live in worse) than

the Indian; they are better fed, better nourished, and better clothed than the Indian, and do not consequently offer the favorable soil for the germs of the disease that the Indian does. Besides this, the Indian has the sad depression of mind that goes with a conquered, subdued race. Tuberculosis is most frequent among the Jews, yet they consider pork unclean, and never eat it. Starchy foods have likewise been accused of bringing about the same tendency in children. Starchy foods play no part in the production of scrofula among these children.

Exciting Causes. Every few years we see a fatal epidemic of measles among the Indians; and, "as a result of the catarrhal condition brought about by this disease together with the lowering of the standard of health, tuberculosis is often contracted at this time. For the catarrhal state, especially of the bronchial mucous membrane, furnishes a favorite soil for the proliferation of tubercle bacilli, which may incorporate themselves in white blood corpuscles and be converted into lymphoid cells which in some parts of the body may become sessile." Bronchitis and pneumonia may also be exciting causes. Any inflammation or injury may rouse the latent tendency or give entrance to bacilli.

Heredity. That the disease is hereditary seems easy of demonstration, but how difficult when we come to facts. Dr. Jani is of the opinion that it may be hereditary in two ways, through the semen of the father, and through the migration of the bacillus into the uterus through the abdominal cavity. Sée and Rhulé are inclined to the belief of post-fetal infection instead of intra-uterine.

Heredity undoubtedly plays an important part. I have seen many cases of tuberculosis and scrofula among these children before they were taken from the breasts, whose parents had some form of the disease. Tuberculous mothers nurse their children; and if the milk of tuberculous cows carries infection so will the milk of tuberculous mothers carry it, especially if they have local tubercular disease of the breast, as they often do.

Consanguineous Marriages. Indians, from an old custom, do not marry blood relatives, consequently this, in my opinion, has nothing to do with the causation of scrofula. But the marriage of those in each of whom tuberculosis is apparent can but bring into the world children who will sooner or later develop some form of the disease, under the law that "like produces like" and "kindred atoms meet again."

Climatic. The climate is unfavorable to the disease when the proper hygienic measures are adopted. It does not predispose to tuberculosis, but instead, on account of the absence of humidity and on account of the dryness of the atmosphere, favors a return to health.

General. Since the disease has once a firm hold on the people, living as they do, there are many ways in which it may be reproduced in those who offer a favorable soil for the growth of the bacilli, and there are few indeed of the Indians whose powers of resistance are maintained.

Preventive Treatment. While the Indian is amenable to treatment as the white man when the treatment is faithfully carried out, the preventive treatment is the one which will undoubtedly do the most good to the greatest number. Viewing the disease as we do, from the standpoint of bacillary causation, it would seem to be almost a preventable disease.

Why was it that the Indians had but little consumption and scrofula among them years ago? Was it not because they were well fed, well clothed, and well housed in a climate almost unsurpassed, and always had that freedom of mind and thought unhampered by the bonds of civilization, roving wild and free in their happy hunting grounds, the undisputed possessors of the land. With their roving disposition they rarely gave a camping place the opportunity to become foul and unsanitary before they were on the move, seeking a new place to erect their lodges. Their skin tipis did not offer the same inducements to maintenance of the bacilli of the disease. When a person died of any disease the lodge was immediately done

away with. Even at this late day in case of death they often tear down their cabins. This practice should be encouraged where consumption is the cause of death, not in the light of their superstition, however, but to prevent at least in a manner future infection of the would-be inmates. Tipis are far preferable to the kind of houses they now live in. They should have well-ventilated modern houses or cottages, or be furnished with heavy canvas tents. They should be given all the advantages of complete civilization, and it should for their own good be forced upon them. Beef cattle delivered at agencies should be inspected by scientific veterinaries before being received. Compulsory education should be enforced, and every one of school age possessing the necessary standard of health should be placed there.

Hygiene and nursing should be taught to pupils of advanced schools; dissemination among them of the causes and nature of the disease, and the best methods for combating and removing it; destroying by fire or chemical agents the sputa, pus, and all suspicious material of consumptive and scrofulous individuals. Strict orders should be enforced in regard to this, and in keeping their homes in a much better hygienic condition.

The writer hopes to soon present some better and more certain proofs of this theory than are here given.

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LOWER BRULE INDIAN AGENCY, DAKOTA.

ABDOMINAL SECTIONS.

Done by Joseph Price, M. D., Gynecean Hospital, Philadelphia.

REPORTED BY J. G. CARPENTER, M. D.

CASE 1. Negress, aged twenty-five years; has gonorrheal pustules; consents to an abdominal section; the tubes and ovaries are diseased and adherent. In tearing through the adhesions the left tube was ruptured, and pus escaped freely into the peritoneal cavity; the peritoneal and muscular coats of the sigmoid flexure were lacerated, on account of the adhesions to the sigmoid; the rent was one by three inches. The peritoneal cavity was irrigated with hot distilled water through the irrigator, the tubes and ovaries removed, and the wounded bowel secured and sewed by several intestinal sutures of fine silk. The abdominal wound was closed with four peritoneal and two superficial silk sutures; the drainage-tube having been inserted, suction of tube was done every minute until the toilet was complete, then every half hour for four hours, then every four hours. When the drainage-tube is found empty it is removed and a rubber one substituted, which is dispensed with in twelve to thirty-six hours. As a rule the drainage-tube was removed in twenty-four hours in this case. The abdominal wound was one inch and a half. After insertion of the sutures and drainage-tube the lips of the wound were approximated and sutures tied, the wound and tube dusted with iodoform, aseptic gauze applied (several layers), the rubber dam sheet applied over tube by the small hole made in its center, stretched, tightly filling the tube to prevent leakage. The spica bandage was now adjusted, the tube packed around and over its mouth, on the sheet of rubber dam, with aseptic absorbent cotton, and the corners of the latter approximated on each other and pinned with safety-pins. At each section of the drainage-tube (if the cotton is soiled) a new supply is used. The wound, dressing, and tube are kept aseptic. This patient recovered completely, as have divers other ones in exactly similar states, or perhaps worse. The successful issue in

these cases is due, no doubt, to the free purgation before operation, and soap and hot water bath, thorough evacuation and drainage of pus cavity and abdomen, removal of the offending masses, the most complete irrigation with hot distilled water, subsequent asepsis and rest, the assiduous watchfulness and attention of nurse and specialist, the conspicuous absence of meddling nurses and young *internes*, the withholding of chemical antiseptics from the abdomen, and the avoidance of dirty antiseptics and asepsis seen so often in the general hospitals. Until general surgeons learn abdominal surgery and simple and plain asepsis, and can be rulers supreme above and over the directors and nurses of the general hospitals, it seems highly consistent to the writer and those who have witnessed abdominal surgery in private hospitals (the results being so much more favorable and better in the latter) that abdominal surgery should not be done in general hospitals; furthermore, abdominal surgery is the field of the specialist and not of the general surgeon.

CASE 2. Mrs. S., aged thirty-eight, previous health good, the mother of seven children; has been regular every month until the last, when she missed her period. Six weeks since menses appeared; she was engaged in active housework; was taken suddenly with violent, continuous, and paroxysmal nauseating pain in the left hypogastric and sacral regions; had syncope, and was a very sick woman for a week; perfectly prostrated; was in bed a week or more; has never been free of pain since; has had irregular bleeding for ten days; difficulty in defecation and urination; fullness, tension, and weight in the pelvis; is even now quite weak and anemic; has walked two or more squares to the Philadelphia Dispensary to get uterine hemorrhage checked; states the pain in bowels was like the cramp or colic; the doctor who attended her treated her for cramps. Digital and conjoined manipulation prove the presence of pain, increased by pressure in Douglas' *cul-de-sac*, right and left pelvis. The cervix is displaced to the right; the posterior and left lateral vault

of vagina are distended, tense, doughy, and elastic; the fundus of uterus can not be mapped out; the whole pelvis, and especially the left and posterior two thirds, is filled with an abnormal product. Diagnosis: Extra uterine pregnancy, with rupture of tube. Abdominal section done; the diagnosis of extra-uterine pregnancy verified. The belly was full of dark fluid, clotted and grumous blood, the clots as large as a lemon; the bleeding vessels were secured with hemostats, the peritoneum freed of its abnormal contents, irrigated with hot distilled water, and thought to be thoroughly cleansed; but after tying the artery and removal of the tubes and ovaries a second irrigation was practiced, when another large clot was washed out, which could not be detected before this. In a similar case the fetus could not be found. A second irrigation was made, and a little male fetus floated to the top of the abdomen and was removed.

Though Mr. Tait's two first cases of extra-uterine pregnancy recovered, they made a long and slow convalescence, with high temperatures and pulse; the embryos could not be found, but no doubt were left in the peritoneal cavity, and were macerated and digested. The latter may explain why these cases had such high temperature and pulse, and the tedious recoveries. Had Mr. Tait made another irrigation the embryos might have been found and recovery accomplished quicker; this is Dr. Price's solution of it.

The right tube being thickened and enlarged, and the ovary scirrhotic, was also removed. Three peritoneal and two superficial sutures were used, the incision being one inch and a half. The drainage-tube remained in twenty-four hours; peritoneal toilet same as described in other sections. Recovery complete; not an unfavorable symptom nor feature since operation.

Three weeks previous to this operation the patient had a sister who died from purulent peritonitis. Had a section been done, the peritoneal cavity thoroughly washed out with hot distilled water and drained, she no doubt would be alive to-day, as are many other women who have been thus rescued.

CASE 3. Negress, aged twenty years; had purulent peritonitis, gonorrheal infection; temperature, 103° F., pulse, 125. Walked from her home to the Philadelphia Dispensary, South Fifth Street. There were detailed the usual subjective symptoms of tubal disease; pus tubes were diagnosed on each side of the uterus; the tubes and ovaries were removed next day by section; they were closed and encapsulated in masses of adhesions. Peritoneal cavity was cleansed by irrigation with hot distilled water, drainage-tube inserted, wound closed by three peritoneal sutures; there was so much tension on pedicle that hemorrhage occurred, a new ligature had to be added. Temperature twenty-four hours after operation was normal; pulse, 80; recovery complete.

CASE 4. Mrs. Z., aged twenty-eight years, has had the subjective symptoms of tubal disease more than a year, and during a good part of this time has been a general hospital patient, but no diagnosis of this disease has been made. By digital examinations and conjoined manipulations diseased masses were detected on each side of the uterus, and abdominal section advised by Dr. E. J. Morris, a young physician not yet twenty-five years of age; in fact, many other cases are diagnosed and section advised by him. So much confidence is placed in his diagnostic ability that many cases are not examined before the section by Drs. Price or Penrose. When the abdomen is entered the diagnosis is verified, and proves the case was one demanding section. There is cyst of left ovary, latter atrophied; tube deformed by adhesions and closed; fimbriæ destroyed; right tube shortened, contorted; ovary atrophied, fimbriæ intact.

CASE 5. Negress, aged twenty years; has salpingitis of gonorrheal origin, perhaps pus tubes. Section: Uterus enlarged, myomatous; tubes thickened and enlarged; tubes and ovaries adherent; fimbriæ intact; cyst of right ovary; patient has had constant pain in both broad ligaments, more on the right side than the left. Masses, on digital and conjoined examination, are exquisitely painful, especially on the right side. The

cyst, tubes, and ovaries are removed; the incision one inch and a half; two sponges, two forceps, two pedicle needles armed with ligatures; three peritoneal and two superficial sutures were used, also irrigations. Recovery. The cyst of ovary really has the appearance of an ovarian pregnancy, and is now being examined by Dr. Formad.

CASE 6. August 24th: Mrs. Y., aged sixty-five years, has had an abdominal tumor two years. Section: Median incision one inch and a half long; sac tapped and emptied, removed through the wound; pedicle ligatured with silk; sac cut away, and from left ovary; tube adherent to sac; no adhesion of sac to other tissues; cyst of right ovary was also found and removed; pedicle ligated; tubes and ovaries removed; tumors and sac and contents weighed seventy pounds avoirdupois. The tumor had never been tapped, and this is exceedingly fortunate for both patient and surgeon. What a great blessing will have been conferred upon humanity and the profession (abdominal surgeons) when the general practitioners, both in the city and country, will have learned that an ovarian tumor should never be tapped, since every tapping jeopardizes the life of the patient, produces numerous adhesions to surrounding viscera, and makes the operation for removal very difficult to perform. They should also learn that an early ovariectomy is the "one thing needful" as soon as a diagnosis of tumor has been made, when the patient is in the best condition possible for an operation, and before active functional disturbances or secondary organic lesions have been produced. The prominent features of this ovariectomy were expert etherizer, one assistant, professional nurse, a short incision one inch and an half, rapid evacuation of tumor and removal of sac, irrigation with irrigator, and two pitchers of hot distilled water; but few instruments, forceps to grasp sac, two hemostats, three sponges, two blunt pedicle needles armed with silk ligatures, sewing needle and thread for sutures (three peritoneal and two superficial); no drainage-tube used, no air admitted to the peritoneal cavity,

and none of the intestines were seen at any time. This operation was an ideal ovariectomy. Patient has recovered completely. It may be truly said of Dr. Joseph Price that he is the ideal abdominal surgeon.

It has been said that some laparotomists have removed healthy organs. This is not true in regard to the work seen in this line in Philadelphia, for numerous patients are found in hospital, dispensary, and private practice. At the Philadelphia Dispensary Dr. Joseph Price and his assistants hold clinics daily, except Sunday, from half past 2 to 4 P. M., for diseases of women. Women come there from the courts, alleys, and back streets. The same holds good at the Out-door Department of the Howard Hospital conducted by Dr. Baldy, one of Dr. Price's former pupils. No special efforts are made to select patients for abdominal section nor special pains taken to have them submit to operation. It is only the worst cases, after other measures have failed, that undergo laparotomy, or those whose present condition demands an immediate operative procedure. These physicians are expert in diagnoses of ovarian, tubal, intra-pelvic, and abdominal diseases. Examining from fifteen to forty patients a day with caution, judgment, and perseverance (they having a desire to know the whole truth), naturally would make them experts in diagnoses; and, should a pus tube, hydro-salpinx, masses of adhesions, or extra-uterine gestation not be diagnosed every time, there is sufficient disease found on section to demand and justify an operation. When women have thickened, hypertrophied, and contorted tubes, enlarged or scirrhotic ovaries bound down firmly in a mass of peritoneal adhesions on one or both sides of the uterus, or the latter displaced and held by adhesions, or a cyst of ovary or broad ligament, pus tube, intra-pelvic abscess, purulent peritonitis, or existing extopic gestation, and have suffered for weeks, months or years, have been made invalids with life a burden, they are not slow in determining the propriety and necessity of an abdominal section, and of being restored to health.

Furthermore, in expert hands abdominal section is not a serious operation. Tait's 145 operations with only 1 death, and Dr. Price's 110 without a death, abundantly proves this assertion.

It is true, verified day by day, that the abdominal surgeon can prevent the sting of death and cheat the grave of its victory; the apparently "worn-out fetters" that bind the soul are not broken, but take on renewed life, vigor, and activity; the bloom of youth and health is made to return and take the place of the pale and anemic cheek. These poor sufferers have scarcely smiled or had any pleasure and happiness in life for months or years; even in twenty-four hours after the section are smiling, cheerful, and some laughing. They say "the pains are gone, can breathe free and easy; before operation were dying, and now feel well." Recovery is complete in two or three weeks, though patients are made to wear a close-fitting abdominal bandage for at least one year.

It is far better for the abdominal surgeon to have living monuments to his memory, though they sometimes be black ones, than be like some physicians who have marble monuments over their patients to remind them of their work and the uncertainty of life.

The writer has seen patients who have been in the general hospitals weeks, or months, without the most serious disease—intra pelvic—being detected, even cases of large pns tubes and intra-pelvic abscess. This class of patients have been treated by the general practitioner for typhoid fever; an extra-uterine pregnancy has been treated for colic, cramps, or dysmenorrhea. The writer does not wish to appear unjust in his criticism of the general surgeon in abdominal work, since he must, to some extent, have to do work in this line, as men are daily being stabbed, shot, gored by vicious beasts, or injured in railroad wrecks, or by machinery, or have a strangulated hernia, and must call on the general surgeon, specialists being few and the distance far between them. But there are two ways of doing abdominal surgery, the right and the

wrong. If the general surgeon does it in the best way, so much the better for the patient; otherwise, so much the worse for both. Let him learn the true way before hazarding life further.

STANFORD, KY.

Reviews and Bibliography.

A Text-Book of Practical Medicine: Designed for the use of Students and Practitioners of Medicine. By ALFRED L. LOOMIS, M. D., LL.D. Eighth edition. Revised and enlarged, with two hundred and fifteen illustrations. 1147 pp. New York: William Wood & Co. 1889.

Alfred L. Loomis is one of those able, careful and clear-headed medical writers of whom American physicians are justly proud, as not only contributing a goodly share of trustworthy original work to the common stock, but as giving caste to the profession in foreign lands. The whole work proves the claim of the author, that the contributions of intelligent observers, both in this country and Europe, have been carefully studied, and that it stands abreast with the present position of conservative scientific medicine. The profuse illustrations of the text are well chosen as to subjects and carefully executed. The author starts out with the indispensable chapter on inflammation, adopting the view of Stricker, that connective tissue-cells return in the course of inflammation to the embryonic form. "The number of free cells," he says, "is increased by the fixed corpuscles of the omnipresent connective tissue, which swell, as has been described, and give rise by proliferation to other cells which can not be distinguished morphologically from the normal wandering cells or leucocytes."

It is with the utmost reluctance and diffidence that a reviewer, who is neither a microscopist nor a pathologist, ventures a doubt in the face of so eminent authority. However, as doctors are not all at one, disciples may claim a greater liberty.

In the field that is here opened up we may gather glimpses of some of the most marvelously beautiful processes that nature affords,

and it is hoped that the microscope may speedily clear up the haze that hangs over this field and substantiate what now may be only the inferences of the philosopher. The observations must be conclusive beyond peradventure which convince students of nature that tissues can return to the embryonic form. They almost as soon expect to see the shadow go backward on the dial-plate. Nor is it customary to find two essentially similar forms originate from different sources. Several years ago the writer, without having read the conclusions of Menchnikoff in regard to the leucocyte, came independently to the conclusion that an important office of the leucocyte is one of digestion.

But this theory was carried farther, to the assertion that a part of the office of the leucocyte is to carry away most, if not all, molecules that become dead while forming a part of the system; that among other offices performed by them they are the universal scavengers of the body. Our bodies are constantly changing; the dead particles are constantly being thrown off from every part. When dead they can not effect their own removal. What power then can act more uniformly than leucocytes large and small? To perform their tasks efficiently, allow them to take forms smaller than those hitherto visible, and to creep through all the tissues in health and disease. Let them go wherever nutritive material is to receive the impress of life; allow them to divide up into almost infinitesimal particles and creep into the lymph spaces, and, feeding on the lymph, to drift with its current into the blood, and there grow to the dimensions of the parent leucocyte. In case of the death of structures extensive enough to produce inflammation, it may be supposed that they rush to such parts for the purpose of feeding on such tissue, now become foreign. It is easier to believe that these small particles of leucocyte substance invade unseen the injured connective tissues, feed upon them, and grow into the field of the microscope, than that particles of connective tissue become leucocytes. This, however, remains a problem of the future.

In the chapter on nervous diseases the author adopts, in some respects, a nomenclature different from that of the leading English writers, not following some of the changes that seem to have been made with apparent good reason. Thus we find amnesic and ataxic aphasia instead of sensory and motor aphasia, which appear much more suggestive and more rational. In ascribing aphasia to injuries to the island of Reil, the author seems not exactly in line with the conservative position so characteristic of his teaching, for high authorities maintain that in no instance has aphasia, either motor or sensory, been observed from lesions absolutely restricted to the island of Reil, and observed after sufficient time had elapsed for accompanying pressure symptoms to have disappeared. However, its situation in the line of communication between the motor and sensory speech centers renders it highly probable that aphasia might occur from a lesion limited to the island of Reil.

But these, if faults at all, are only minor faults, and the appearance of the ninth edition of "Loomis' Practice" will be greeted throughout the land. D. T. S.

A Manual of Minor Surgery and Bandaging, for the use of House Surgeons, Dressers, and Junior Practitioners. By CHRISTOPHER HEATH, F. R. C. S. Ninth edition. 361 pp.; price, \$2.00. Philadelphia: P. Blakiston, Son & Co. 1889.

The aim of the eminent author in this work was to afford brief directions to young surgeons in the treatment of various accidents likely to come under their care. To a very great extent the repetition of matter found at greater length in the various handbooks of surgery has been avoided, and attention given to the minor points which are usually imparted only by oral instruction. Some supplementary chapters have been devoted also to ease-taking and the examination of the dead.

Since the appearance of the first edition of this work, which was indeed a pioneer in its department, a number of very excellent works have been given to the profession, involving various of its features, and equal-

ing if not surpassing it in particular respects. On the whole, however, no work, perhaps, of the same scope of this has surpassed it in excellence. It can not fail to be of great advantage to any who are anxious to gain a knowledge of the smaller details of surgery, and particularly those who may not have had the opportunity of more or less hospital training.

D. T. S.

The Principles and Practice of Surgery. By JOHN ASHHURST, jr., M. D. Fifth edition, enlarged and thoroughly revised, with six hundred and forty-two illustrations. Pp. 1148. Price, cloth, \$6.00; leather, \$7.00. Philadelphia: Lea Brothers & Co. 1889.

The position of "Ashhurst's Surgery" is so well established in professional favor that the reviewer has little more to do than announce its appearance in a new edition. It is not even necessary to note the changes that may have been made from former editions, since the faithful mirror of progress furnished by former editions has established a positive presumption that the latest and best teachings are given in the work. The illustrations are chosen for use and not display, and in that charming peculiarity of style that makes easy reading, and yet chains the attention, it is not surpassed by any work on surgery. As a single volume work on surgery it has hardly anywhere an equal, and it is a pleasant task to give it the fullest indorsement.

D. T. S.

Foods for the Fat; a Treatise on Corpulency and a Dietary for its Cure. By Nathaniel Edward Davies, Member of the Royal College of Surgeons, England. American edition; edited by Charles W. Greene, M. A., M. D., Philadelphia: J. B. Lippincott Company. 1889. Price, 75 cents.

A Manual of Obstetrics. By W. F. A. King, A. M., M. D., Professor of Obstetrics and Diseases of Women and Children in the Medical Department of the Columbian University, Washington, D. C., and in the University of Vermont, etc. With one hundred and forty-one illustrations. Fourth edition. Philadelphia: Lea, Brothers & Co. 1889.

Through the Ivory Gate; Studies in Psychology and History. By William W. Ireland, M. D. (Edin.), formerly of H. M. Indian Army; Corresponding Member of the Psychiatric Society of St. Petersburg, and of the New York Medico-Legal Society; Author of "The Blot upon the Brain." New York: G. P. Putnam's Sons; Edinburgh: Bell & Bradfute. 1889. Price, \$3.

A Manual of Minor Surgery and Bandaging for the Use of House Surgeons, Dressers, and Junior Practitioners. By Christopher Heath, F. R. C. S., Surgeon to University College Hospital, and Holme Professor of Clinical Surgery in University College, London; Member of the Council and Court of Examiners of the Royal College of Surgeons of England. Ninth edition. Philadelphia: P. Blakiston, Son & Co., 1012. Walnut Street. 1889. Price \$2.

The Principles and Practice of Surgery. By John Ashhurst, jr., M. D., Barton Professor of Surgery and Professor of Clinical Surgery in the University of Pennsylvania; Surgeon to the Pennsylvania Hospital; Senior Surgeon to the Children's Hospital, etc. Fifth edition, enlarged and thoroughly revised, with six hundred and forty-two illustrations. Philadelphia: Lea Brothers & Co. 1889.

A Text-Book of Practical Medicine. Designed for the use of Students and Practitioners of Medicine. By Alfred L. Loomis, M. D., LL.D., Professor of Pathology and Practical Medicine in the Medical Department of the University of the City of New York; Visiting Physician to Bellevue Hospital, etc. Eighth edition, revised and enlarged, with two hundred and fifteen illustrations. New York: William Wood & Co. 1889.

A Treatise on Diseases of the Nose and Throat, in two volumes. By Francke Huntington Bosworth, A. M., M. D., Professor of Diseases of the Throat in the Bellevue Hospital Medical College, New York; Consulting Physician to the O. D. P. Department of the Bellevue Hospital; Fellow of the American Laryngological Association, of the American Climatological Association, of the New York Academy of Medicine; Member of the New York Laryngological Society of the Medical Society of the County of New York, etc. Vol. I: Diseases of the Nose and Naso-Pharynx, with four colored plates and one hundred and eighty-two wood-cuts. New York: William Wood & Co., 56 and 58 Lafayette Place. 1889.

Essay on Medical Pneumatology: A Physiological, Clinical, and Therapeutic Investigation of the Gases. By J. N. Demargnay, Surgeon to the Municipal Hospital, Paris, and of the Council of State Member of the Imperial Society of Surgery, etc. Translated with notes, additions, and omissions. By Samuel S. Wallian, A. M., M. D., member of the American Medical Association, ex-President of the Medical Association of Northern New York, etc. Illustrated with fine wood engravings. Philadelphia and London: F. A. Davis, publisher. 1889.

A Treatise on Materia Medica, Pharmacology, and Therapeutics. By John V. Shoemaker, A. M., M. D., Professor of Materia Medica, Pharmacology, and Therapeutics in the Medico-Chirurgical College of Philadelphia, and member of the American Medical Association, and John Aulde, M. D., Demonstrator of Clinical Medicine and of Physical Diagnosis in the Medico-Chirurgical College of Philadelphia, etc. In two volumes—volume one devoted to Pharmacy, General Pharmacology and Therapeutics, and Remedial Agents not Properly Classed with Drugs. Philadelphia and London: F. A. Davis, publisher, 1889.

Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

A series of experiments have been carried out with a view of ascertaining the smallest quantity of any antiseptic substance which is capable of preventing the development of the bacillus of typhoid, cholera, and tuberculosis. The culture of the typhoid bacillus was prevented by 1 part of corrosive sublimate on 20,000 parts culture medium, 1 part of sulphate of quinine on 800 of culture medium, 1 part of carbolic acid on 200, 1 part of hydrochloric acid on 105 parts of chloride of lime on 100 parts of culture medium. The cholera bacillus (coma bacillus of Koch) will not develop in an acid medium. One drop of a one-per cent solution of hydrochloric acid prevents it. Its development is also prevented by 1 part of corrosive sublimate on 100,000 parts of culture medium; 1 part of sulphate of quinine on 5,000 parts, 1 part of sulphate of copper on 500 parts, and 1 part of carbolic acid on 400

parts of the culture medium. Many substances, such as salol, ether, chloroform, fluoride of sodium, iodoform, etc., hinder remarkably the culture of the bacillus of tuberculosis, but those which sterilize the culture medium of this bacillus completely are hydro-fluo-silicic acid, ammonia, fluo-silicate of iron, fluo-silicate of potash, polysulphide of potassium, and silicate of soda.

A project is under discussion which is likely to excite deep interest among men of science. It is proposed to celebrate the fame of Dr. William Gilbert, who had the honor to be Queen Elizabeth's physician, and the much greater renown of founding the twin sciences of magnetism and electricity. He practiced the experimental method of inquiry before Bacon had written about it, and this won for him Bacon's sneers and the praises of Galileo and Kepler. A club has been established to republish his great work "*De Magnete*," and celebrate in 1900 the tercentenary of its first issue. The club already reckons some of our most distinguished savants, among them Sir W. Thomson, Mr. Jonathan Hutchinson, Prof. Hughes, and many others.

In spite of the Habitual Drunkards Acts the dipsomaniac practically still remains a burden to himself and a serious damage to society. So much at least appears clear from the testimony of the various speakers at the important gathering of medical men in Birmingham, who heard and discussed the address of Dr. Gairdner on this melancholy subject. On the other hand, the opinion that the law when it can be put into operation does nevertheless afford a means of curing what is universally regarded as a terrible disease seems no less decided. Fortified by thirteen years' practical experience of a Home for Inebriates under the acts, one speaker certified that he had under his care clergymen, medical men, lawyers, and persons of other ranks of society who, after twelve months detention—the maximum time permitted by law—have been turned out sober men, and have been found in that condition seven or eight years after their discharge. In some instances the mental and bodily condition of these patients had been deplorable, the speaker describing them as being, even for months af-

ter their entrance, unable to find a door in the house, or to recollect for ten minutes what they had said or what had been said to them. This agrees with the received theory that enforced abstinence will in a certain time suffice in itself permanently to cure the drink craving. But unfortunately only a very trifling percentage of our habitual drunkards are found ready to voluntarily subject themselves to restraint and fulfill the formalities for that purpose which the law requires. The complaint is general, especially in respect to women who have given way to this fatal vice, that it is impossible to get confirmed inebriates to sign a consent to enter a Home, and most patients when they do so are under strong pressure from their friends.

Mr. Bruce Clarke, who has for some time been paying special attention to the treatment of cures of stricture of the urethra by electrolysis, gave an account of his experience of such treatment at the recent meeting of the Medical Society of London. Mr. Bruce Clarke began by calling attention to the exact method to be employed, pointing out how extremely necessary it was that the operator should be master of his apparatus. He went on to show that the process was not in reality a destructive one, but consisted in modifying and softening the cicatrices by which the strictures are produced, a fact which could be witnessed by any one who would take the trouble thus to treat a stricture of the urethral orifice. Next he referred to the necessity for the use of a galvanometer and the variety of conditions to which electrolysis were applicable as additional examples of the varied capacity for good or for evil of the electric current. The instruments and the methods of using them were fully explained, the various instruments being handed round the room. Mr. Bruce Clarke then pointed to a table of fifty cases treated by him, and discussed certain other points in connection with electrolysis. He thought some of the cases could not be explained merely on the theory of absorption. One case was mentioned in which an ulcer was present, where electrolysis produced a rapid cure. He cited cases to show that just as it had been shown that a rectal stricture might begin by spasm of the muscular fibers, so urethral stricture could

and often does begin in a similar fashion, an irritable ulcer being the starting point. The caustic alkali liberated by the negative pole of the battery cured the ulcers, and thus relieved the muscular spasm, while, if it failed to cure the ulcer, it might in rare cases aggravate it, and so intensify the stricture. Of the fifty cases, twenty-three were known to be well after periods varying from one and a half to three years, and in two cases no relapse had taken place for four years, while only nine were known to have required subsequent treatment.

The examination of the St. William's Fever Hospital, which was partially destroyed a few days ago at Rochester, has revealed the extraordinary fact that birds have been the innocent cause of the disaster. The towers connected with the ventilators are quite open, and inside one of these has been found about half a bushel of straw which had been carried in by birds for the purpose of making the nests. The ignition of this straw in the chimney where the fire broke out is regarded as the cause of the conflagration.

Dr. Berry Hart in a recent lecture dwelt on the importance of making provision in the future for the maintenance of a high standard of health in women. In the competition into which women had entered with men, and in the general desire among them to be better educated, there was great danger that their nervous system would suffer, and secondarily, their health in other most important aspects. In the higher schools Dr. Hart pointed out that harmful educational pressure did exist, and girls at ages from nine to thirteen worked continuously on an average eight to ten hours daily over a period of eight or nine months a year. These girls ought to get lots of out-door exercise and not be limited to gymnastic exercises.

A satisfactory color-test for the selection of railway servants has been produced by Dr. H. F. Lediard, of Carlisle, surgeon to the railway companies of that district. Dr. Lediard's device consists of a revolving series of colored glasses lighted from behind by a flame, and tinted like the lamps of signal boxes. Purple, mauve, green, yellow, blue, and red, are the colors chosen, and the list includes all that are

employed on railways. The effect of fog can be produced by smoke or ground glass in front of the colored panes.

LONDON, December, 1889.

Abstracts and Selections.

THE APPROACHING REVISION OF THE PHARMACOPEIA.—“*Eile mit weile.*” Progress in pharmacy is progress in medicine, and all physicians should be inspired by a desire to improve in every possible way the Pharmacopeia, which represents the accumulated experience of ages in the science and art of pharmacy, and constitutes the most reliable guide to pharmacists and physicians who would acquaint themselves thoroughly with medicinal principles and their effectual combination in eligible pharmaceutical preparations. The value of any addition to the Pharmacopeia suggested by pharmacists should, therefore, receive the earnest consideration of physicians, and the medical profession should be able to furnish from their clinical experience many important and vital suggestions to the committee who are intrusted with the important duties of revision. This committee, indeed, invites criticism from all well-informed sources, and has widely distributed a Digest of Criticisms of the present Pharmacopeia for the purpose of the freest and fullest discussion by all concerned. It is in this spirit that the following criticisms are submitted.

As the generally accepted standard of strength and quality for medicinal preparations, the United States Pharmacopeia should be most carefully compiled and removed as far as possible from all mercenary influences. One interest which is liable to influence the publication of the next Pharmacopeia disadvantageously, unless such influence is properly controlled and judiciously acted upon, is the manufacturing pharmaceutical interest.

Owing to its wide-spread circulation, its general acceptance as a standard, the Pharmacopeia must exert a very powerful influence both with physicians and druggists in the direction of inducing a larger consumption of pharmaceutical preparations. Thus, houses who own copy-righted, trade-marked, or patented preparations would be willing to pay large sums to induce the Pharmacopeia to recognize the same. The adoption of a new standard of pharmaceutical preparations to substitute existing standards of the present day could be used to great and profitable advantage by the manufacturers if they controlled by copy-right, or trade-mark, or patent, the name of the line of pharmaceutical preparations, or the line itself.

What a profitable thing for the originator, for instance, would be the recognition by the Pharmacopeia of the line of pharmaceutical preparations known as specific medicines, specific tinctures, or green root tinctures as a substitute for the fluid extracts which have been so long in vogue! Shall antipyrin, antifebrin, sulphonal, chloralamid, and many other specialties of foreign manufacturers, who are flooding the country with remedies protected by patented processes or fancy trade-marked names, so as to secure to their possessors a permanent monopoly at any outrageous price they may wish to arbitrarily fix, be admitted to the Pharmacopeia? Are such remedies and their literature to usurp a place in scientific literature to the disgrace of the legitimate interests of pharmacy, the aggrandizement of foreign capital, and the destruction of pharmaceutical nomenclature?

We do not wish to be misunderstood in this matter. We do not wish to reflect on the therapeutic utility of such preparations, but merely to make thoroughly apparent the caution and care necessary to consider the true character and tendencies of the many products advanced for pharmacopeial indorsement.

It is not necessary to amplify on these points. The tendencies of these defilers of the pharmacopeial temple are too well known to ever receive the recognition they covet.

There are, indeed, many actual and much-needed improvements required in this temple of pharmacy, if we may continue our simile, which have none of the disadvantages, to say the least, of this rapidly growing progeny of foreign invaders. Let the committee address their attention to these. To what standards of excellence do our average manufacturers of medicine live up to at the present time? Are these standards the highest and best known to pharmaceutical science? Not at all; and we shall take occasion, in further comments on this important subject, to mention some improvements in pharmaceutical processes, the claims of which are eminently more worthy of consideration by the Committee of Revision. It will be readily seen that manufacturers of pharmaceutical preparations generally could well afford to bring to bear great influence upon the projectors and controllers of the Pharmacopeia, if they had the slightest hope of inducing the committee to act upon their suggestions.

It is, therefore, essential that the committee in charge of the Pharmacopeia should be actuated solely by a regard for scientific and humanitarian interests. They should be men not only honest in purpose, but they should also be sufficiently competent by experience to judge

as to the merits of each individual presentation. They should be free from all bias and prejudice. *Eile mit weile.* To make haste slowly should be their guiding rule.—*Med. Age.*

PREVENTIVE INOCULATION FOR YELLOW FEVER.—The following report was presented to the Academy of Sciences, France, by Dr. Domingos Freire, Professor of Organic Chemistry and Biology in the Faculty of Medicine of Rio de Janeiro, Brazil: "The epidemic of yellow fever that developed in Rio de Janeiro in 1888 and 1889, and which propagated itself in several other places in the interior of Brazil, has been the means of demonstrating for the fourth time the value of inoculations by means of the attenuated microbe of yellow fever. The maximum of the epidemic was between the months of December and March, the first sporadic cases having appeared about the end of the month of May, 1888, and the last in June, 1889. During this period there were inoculated 3,570 people, to wit: 988 strangers and 2,582 Brazilians, divided thus: The city of Rio, 2,138; city of Campinas, 651; town of Vassouras, 199; city of Nicteroy, 166; city of Santos, 133; Desengano, a village of 425 inhabitants, 102; Serraria, a small town, 80; city of Rezende, 54; Catagauzes, a village of 2,000 inhabitants, 50. The disease swept with great intensity in all of these spots, and the vaccinations were made, for the most part, during the height of the epidemic. Of the 2,582 Brazilians, there were 1,740 that should be added to the 988 strangers, as this figure embraces not only individuals coming from the interior and resident in the city of Rio for less than six years—that is to say, non-acclimated—but also children who, according to our experience, are just as susceptible as the strangers themselves. The rate per hundred of mortality among the vaccinated was 0.078; at Santos, at Rezende, at Serraria, and at Catagauzes the immunity from the disease was absolute. Here is the rate per cent from each locality: Rio, 0.98; Campinas, 0.46; Vassouras, 0.05; Nicteroy, 0.75; Santos, 0.00; Desengano, 0.09; Serraria, 0.00; Rezende, 0.00; Catagauzes, 0.00. The mortality from yellow fever among the non-vaccinated was 4,135, divided thus: City of Rio de Janeiro, 2,407 (this includes the dead from the Marine Hospital); Campinas, 812; Vassouras, 15; Nicteroy, 177; Santos, 650; Desengano, 221; Serraria, 21; Rezende, 11; Catagauzes, 20. Among the 4,135 there were about 2,800 strangers, of whom 1,176 died in Rio (and 750 of these in the Marine Hospital), 63 at Nicteroy, 500 (about) at Santos, 300 (about) at Campinas, 7 at Desengano, 3 at Rezende, 3 at Vassouras. Thus one fourth of

the deaths were among Brazilians who were unaccustomed to the poison, inasmuch as they resided in localities where the epidemic appeared for the first time this year. In order to make the efficacy of the inoculations more marked, it suffices to remember the proportion established by M. Jemle in Senegal, to wit, that among the strangers who had been there from one to three years, 75 per 100 were attacked by yellow fever, and 68.06 per 100 died. Applying these facts to the vaccinated strangers, or the provincials who had from a few days to three years' residence in the infected locality, we obtain the following result: At Rio we vaccinated 1,183 people under the above conditions, of whom at least 591 should have succumbed to the disease, but only 18 died. Thus 573 lives were saved. At Campinas, a city that never before had an epidemic of yellow fever, and where the 651 inoculated might be considered as new arrivals, of whom 325 should have died, the unsuccessful inoculations were but 3. At Vassouras, 5 should have died; one only died, who was not a recent arrival. At Nicteroy the 11 strangers, under the conditions cited above, should have furnished 5 deaths; one only was a victim. At Santos, of 57 persons under the same conditions, 28 should have died, but the immunity from disease was absolute. At Desengano, the two unsuccessful inoculations were among strangers who had lived from six to eight years in the country. But in view of the fact that the disease obtained for the first time, all of the 102 persons inoculated were as susceptible as strangers who had just arrived. Among them 51 should have died. At Serraria, according to the main calculation, 39 should have died, whereas the immunity from the disease was absolute. The same reflections apply to Rezende, where the 54 vaccinated should have furnished 27 deaths, and at Catagauzes, where the 50 vaccinated should have furnished 25 deaths, in view of the fact that the epidemic made its first appearance in these two localities; still the immunity was perfect, without exception.—*N. Y. Medical Record.*

TUBERCULOSIS IN MEAT.—The importance of meat tuberculosis is attracting the attention of sanitary authorities, and is no doubt a very serious problem for butchers and graziers. The decision in the Glasgow case, which is now celebrated, and the recent actions at Sheffield, prove that, so far as the health of her Majesty's subjects is concerned, there is a strong opinion of the infectivity of meat from an animal which has suffered from tuberculosis. Last week the sanitary inspector of Wigan seized part of a carcase of a cow which was dressed

for food, and took Mr. Barnish, medical officer of health, to see it. He examined the meat, and from the appearance of the texture could not say that it was unfit for the food of man; but seeing the lungs, pleura, and intestines, in which tubercles were present, he had the meat taken before a magistrate and condemned. The butcher was summoned before the magistrates (Mr. Roocroft and Mr. Pendlebury), who, after hearing the evidence of Mr. Barnish and his inspectors, fined the man twenty shillings and costs. At the same time, they considered that the defendant was not aware that the meat was unfit for food. The proceedings were taken under the 116th Section of the Public Health Act, and for the defense Mr. Macloghlin was called and two butchers, all of whom considered the meat fit for consumption. This is the first case of the kind in Wigan, and to the butchers of the town is one of serious importance, because undoubtedly a large number of beasts, especially those stall-fed, are subject to tubercles, and hitherto it has been considered, if the meat was unaffected, that is, no general tuberculous, it could be sold for food without any danger to man. Mr. Barnish in his evidence, alluded to the prevalence of tuberculous in the town, and thought that consumption of this class of food was a cause of it, whereas Mr. Macloghlin thought the reverse, and the following extract of a letter from a very eminent professor of pathology of the University College, Liverpool, was read: "It has not yet been proved that the flesh of tuberculous animals is tuberculous of necessity. There is no legal decision on the subject in England so far as I know." Now this subject is of so much importance that it should be settled positively whether or not the flesh of an animal which has only tubercle in the lungs and no general infection or glandular infection should be destroyed or not. It is too important a subject to depend on scientific opinions only. In the Glasgow case, for example, men of equal scientific attainments and experience gave entirely opposite opinions, so that a poor butcher or grazier might have a cow or the meat of an animal passed by the meat inspector of Birmingham or Leeds, while if he had the same beast dressed in Glasgow or Edinburgh it would be seized and destroyed. No doubt the subject is one of vital importance to her Majesty's subjects from a health point of view, but even from an economic point it is of very great moment.—*London Lancet*.

THE WORK ALREADY DONE IN THE DIRECTION OF STANDARDIZING FLUID PREPARATIONS.—The first and most notable advance made in the direction of supplying stan-

dardized preparations not open to the dangers of the existing pharmacopœial processes for fluid extracts, was by Messrs. Parke, Davis & Co., who introduced in 1883 a class of assayed preparations which were entitled normal liquids. The standard decided upon for these fluids was the result of long experience in the collection, purchase, examination, and analysis of crude drugs, with a determination of the amount and character of their active principles. The reliability of normal liquids soon led to their large consumption, and the medical profession have evinced their preference for them to such an extent as to make them now an established and popular method of exhibiting the toxic and narcotic drugs.

Normal liquids may be defined to be concentrated tinctures, the methods of manufacture of which serve as models for imitation. They represent more closely than fluid extracts made by the present pharmacopœial methods the average standard strength of crude drugs. The simplest explanation of their nature would probably be to regard them as fluid extracts adjusted by assay to a fixed standard of strength which makes them absolutely uniform in composition and therapeutic action.

The favor with which normal liquids and assayed products generally have been received by representative men of the medical profession has led us to believe that the best interests of pharmacy will not be served unless these or like preparations are officially recognized. For concentrated tinctures of a definite strength, the name "normal liquids" appears to be happily chosen, as it implies a definite standard of strength. The list should embrace preparations of the more potent crude drugs, one ccm. representing one gram of drug of standard strength.

It does not seem to us, from a careful review of all efforts made in this direction, that any have met with equal acceptance or merit as much appreciation. Whatever may prove to be the decision of the committee as to making such assayed preparations official, there can never be any question as to whom the honor of their actual practical introduction is due.

As the time approaches when the revision is to take place (and in the minds of thinking men the standardization of fluid extracts is now an accepted fact) there will no doubt be many competitors for this honor who may claim, by reason of a mushroom-like growth in the field of this new department, official recognition for scientific work.

It will be necessary on the part of the Committee of Revision, therefore, to carefully investigate the claims in this direction, and when awarding the credit for such work to see that they do not place the laurels upon the wrong brow.

Unsupported and disinterested scientific labor, no matter from what source, should always be welcomed with the indorsement of scientific men, and we sincerely trust that the efforts made in this direction by those deserving it will receive full appreciation at the hands of the compilers of the forthcoming Pharmacopeia.—*Medical Age*.

EMPHYEMA OF THE ANTRUM.—At the last meeting of the Odontological Society Dr. Felix Semon read a paper on Some Points in the Etiology, Diagnosis, and Treatment of Empyema of the Antrum. In the great majority of cases the antrum is affected secondarily, the pathological process starting either from the nose or from the teeth; but in some few cases it is quite possible that it has originated in the antrum itself. Any inflammatory process affecting either the mucous membrane or the bones of the nose or the periosteum of the teeth or alveoli may set up purulent inflammation of the antrum. Authorities differ with regard to the relative frequency of these two main causes, but Dr. Semon thinks that clinical observation shows that an overwhelming majority of cases of antral empyema have their origin in affections of the alveoli of the teeth. Bayer, of Brussels, draws especial attention to the frequency of the combination of nasal polypi with purulent catarrh of the antrum, and as exceptional causes may be quoted its occurrence after section of the infra-orbital nerve by Malgaigne's method and from the stump of a tooth being forced into the antrum during an attempt to extract it. The diagnosis of empyema of the antrum may be divided into (1) cases in which there is no discharge into the nasal cavity, and (2) cases where from some cause the opening is not patent. In the great majority of cases in which the nasal opening is not obstructed the disease is characterized by a unilateral periodical discharge from one nostril, the periodicity corresponding to the different positions of the patient's head. From the anatomical position of the ostium maxillare the pus can only find exit when the antrum is nearly full or in certain postures, as when recumbent, especially when lying on the sound side, or leaning forward, as in writing. Frontal headache, depression of spirits, and general derangement of health

are frequent accompaniments. With a good light and a nasal speculum the pus may be seen issuing from the ostium maxillare, the superior meatus being healthy. If this is not clear, the nose should be carefully cleansed and the patient directed to lie down for a few seconds on his abdomen on a sofa, with the head low and inclined to the sound side, when, upon resuming the horizontal position, if there is pus in the antrum, a greater or less quantity of discharge will be seen in the middle meatus. Where there is obstruction of the ostium maxillare there will be, in extreme cases, distension of the inner wall of the cavity, and in almost all cases violent neuralgic pains in the face and teeth of the affected side, and often swelling of the soft parts of the cheek, sometimes of an erysipelatous character. In forming a diagnosis it must not be forgotten that disease of the frontal or ethmoidal cells may coexist. Should an exploratory opening be necessary to clear up the diagnosis, it may be made through the nose, the socket of a tooth, or the alveolus, either of the two latter being preferred by Dr. Semon. Heryng maintains that in obscure cases electric trans-illumination is of great value. The patient is placed in a perfectly dark room and an electric lamp of not less than five volts passed into the mouth, when the maxilla will appear red and translucent on the sound side, but dark on the affected one. With regard to treatment, which is essentially free drainage, Dr. Semon decidedly prefers an opening through the mouth to one through the nose, as it is the most dependent part and most easily accessible to the patient for syringing; but in obstinate cases he advocates a counter-opening in the nose, and, that failing to effect a cure, a large opening through the canine fossa and stuffing the antrum with iodoform gauze.—*London Lancet*.

INTESTINAL SUPERDIGESTION.—An article with this title appears in the New York Medical Journal of November 9th, from the pen of Dr. W. S. Christopher, of Cincinnati. The term is used to designate the pathological fermentation of the products of normal intestinal digestion. The author's deductions are based upon well-established chemical laws, and, if true, go far toward the explanation of a train of phenomena concerning which our knowledge has been very incomplete.

Christopher's aim is to elucidate the pathology of the intestinal fermentations. He objects to the prevalent idea that fermentation is opposed to digestion; or, in other words, that a food may be either digested or undergo fer-

mentation, but can not be both digested and fermented. On the contrary, he believes that the action of the digestive ferments is usually, if not always, a prerequisite to the action of the micro-organisms of pathological fermentation. The process is thus brought into analogy with the alcoholic fermentation of cane sugar; for it is a well-known fact that the latter process can not occur until the sugar has been inverted; that is, transformed into the two glucoses, dextrose and levulose, by a soluble ferment accompanying the yeast plant and probably produced by it. Superdigestion is always induced by micro-organisms, and varies in its results according to the food upon which these develop.

We have, therefore, superdigestion of proteids, of fats, and of carbohydrates; and each of these forms is discussed in the paper.

Concerning the superdigestion of proteids, the author tells us that it may also occur in the stomach, but is there less frequent than in the intestine. In the products of tryptic digestion it is exceedingly common. This difference he believes is due less to any doubtful antiseptic action on the part of the gastric juice than to the difference in extent of the digestion or decomposition of the albuminoid molecule produced by the two juices. "The most interesting of the decomposition products of proteids, for our present purpose, are the fatty acids, the ptomaines, and the gases, which latter comprise carbonic acid gas, ammonia, nitrogen, hydrogen, marsh gas, and sulphureted hydrogen." The ptomaines, the most important of these products are alkaloids, and produce their effect through the agency of the central nervous system. A frequent group of symptoms produced by this putrefaction "comprises constipation, headache, drowsiness, and listlessness, or even marked depression—the so-called biliousness." The author has also seen a group of symptoms comprising "constipation, coma, contracted pupils, slow and shallow respiration, and a depressed heart-action."

But he considers the superdigestion of the carbohydrates the most important as well as the most frequent form of intestinal fermentation in adults. Normal digestion converts all the carbohydrates, starch, cane sugar, maltose, lactose, into glucoses. Subsequent fermentation may convert the glucose into alcohol with liberation of carbonic acid gas; or into one of several fatty acids, which in turn breaking up give rise to carbonic acid gas, and hydrogen or marsh gas. The clinical features and the treatment of this form of fermentation were presented in the report of two cases in which the trouble had been diagnosticated and suc-

cessfully treated. The most prominent symptoms were constipation, tympanites, and abdominal pain. The chief feature of the treatment was the withholding of those articles of diet (carbohydrates) in the products of whose digestion the abnormal fermentation was believed to have occurred. However, since total abstinence from the carbohydrates for any length of time is next to impossible (and this implies the exclusion of milk on account of its contained sugar), the author recommends the allowance of a small amount of farinaceous food and the administration therewith of an active diastatic ferment by means of which the starch may be digested in the stomach.

We doubt not that Dr. Christopher has given us a true explanation of a certain number of cases of intestinal fermentation; in other words, that he has described a possibility. We regret, however, that he has not given us some data in support of his assertion that this is the most frequent form of intestinal fermentation beyond the fact that such is his individual belief. The frequency with which we encounter in these cases gross errors in diet with the passage of undigested food, especially in children, is sufficient evidence that fermentation may occur in food that has wholly or in part escaped the action of the digestive juices. And although the paper is expressly limited to intestinal fermentations, it seems that stomacheic fermentations should have been discussed so far at least as to point out the means of distinguishing them from processes occurring in the bowels.

We trust that the author will yet more fully elaborate his theory with especial reference to the relative frequency of superdigestion and its differential diagnosis.—*Journal American Medical Association.*

STRANGULATED INGUINAL AND FEMORAL HERNIA ON THE SAME SIDE.—T. T., aged sixty-four, laborer, in August, 1888, had consulted me suffering from a strangulated inguinal hernia, which had made its appearance the day before, and which with a good deal of difficulty I reduced by taxis. Since that time he has worn an inguinal truss. On September 12, 1889, after working in a hop-field, he suffered great pain in the abdomen, and in the evening noticed a swelling below his truss. He had constant attacks of sickness during the night, the pain still being very severe. In the morning he came to see me, still wearing his truss. At first I supposed that the old rupture must have slipped down under his truss, which was a new one, but on making an examination I discovered a femoral hernia about the size of a walnut protruding below the truss. The inguinal ring could be felt free and unoccupied.

After making an ineffectual attempt to reduce it by taxis, I sent him into the Malvern Rural Hospital. After his arrival there the symptoms subsided to a great extent, there had been no return of the sickness, and the pain had almost disappeared. After holding a consultation with Drs. Dawson and Holbeche, and making another effort to reduce by taxis, I decided to operate at once without waiting for further or more urgent symptoms. The operation was performed under the influence of chloroform. On opening the sac a little blood-stained serum escaped, and the intestine was seen to be considerably congested; the stricture was very tight, but after incision allowed the intestine to be returned. A catgut drain was inserted, and the wound closed with three silk sutures. The symptoms subsided immediately after the operation, but there was no action of the bowels till the third day, when an enema was given. The wound healed by first intention, and the sutures were removed on the fourth day, the catgut drain having been removed the morning after the operation. The patient was discharged after having had a special truss made to cover both the inguinal and femoral rings.

The remarkable features of this case are, firstly, the occurrence of an inguinal and femoral hernia, on the same side, both being strangulated; and, secondly, the subsidence of the acute symptoms in spite of a very tight strangulation, showing that symptoms can not be depended upon as a guide to operation, and emphasizing the rule that, other means having failed, the sooner the operation is performed the better.—*Dr. G. Tyrrell, London Lancet.*

NEURASTHENIA AND DILATATION OF THE STOMACH.—Carron de la Carrière has published in the *Bulletins et Mémoires de la Société de Médecine Pratique* an article of considerable interest on the subject of Neurasthenia and Dilatation of the Stomach. He describes an aggregate of symptoms often associated with dilatation of the stomach, symptoms which have been sufficiently familiar under the name of nervous dyspepsia. There is a sensation of weight and distension of the stomach after meals; this is accompanied by flushing of the face, and a tendency to somnolence. These patients are apathetic, and seldom in trim for mental work; they are incapacitated for much physical exertion. Constipation is habitual. In bad cases the appetite is diminished or lost; digestion is painful and accompanied with pyrosis; and palpation and succussion give the characteristic signs of gastrectasia. Fatigue is a prominent symptom; exercise speedily tires. The eyes ache

after reading a few minutes; there is a continual disposition to lie down; such patients are often more tired in the morning on rising than when they went to bed. They complain much of insomnia. Headache and backache are every-day phenomena. The extremities are cold and livid.

Carron hesitates amid the complexity of symptoms, and asks whether in these cases, which are only too frequent, the gastric alteration is primary, reacting on the organism, and bringing about in the long run, by failure of nutrition, the general dilapidation and the want of equilibrium in the nervous system, or whether one has to do with a primary neurasthenic condition in which the gastric phenomena predominate? He inclines to the opinion that there are two classes of cases: one in which the stomach is primarily affected, entailing on the organism perturbations; the other, in which "the neurasthenia commences and the affection of the stomach completes the tableau."

Of course, the treatment would be widely different in the two classes, and an accurate diagnosis is imperative in order that successful therapeutic results may be obtained.

Dujardin-Beaumez makes gastric neurasthenia the subject of a recent Cochin hospital lecture, and of a subsequent communication to the Society of Practical Medicine. He believes that in the great majority of cases neurasthenia is of gastric origin, and that patients affected with this malady will be found to have all the symptoms of dilatation of the stomach. He insists on the emaciated appearance of these subjects, their bilious hue, their melancholic disposition, the odd, varying, nervous symptoms, which are not, however, those of hysteria; palpation gives a splashing sound; sometimes the liver is congested and, when the dilatation is considerable, in most cases there is a right-sided renal ectopia. These persons are always dyspeptic and constipated. He mentions the various theories which have been proposed to explain the relationship between the neurasthenia and the gastrectasia, and inclines to that of Bouchard.

According to Bouchard, all the train of morbid phenomena depend on the penetration of the economy by toxins, which result from vicious fermentations taking place in the dilated stomach. These toxins produce a veritable systemic poisoning, and the passage of these organic alkaloids through the liver congests that organ, and gives rise consecutively to a crowding down of the right kidney, a displacement which tends to become permanent.

Beaumetz thinks that the dilatation of the stomach, which causes the nervous phenomena, will in almost all cases, be found to be a hereditary malady; it results directly from a toneless, parietic state of the gastric muscle; subjects of gastrectasis will be likely to transmit a similar condition to their offspring.

In the treatment of gastric neurasthenia two leading indications must be kept in view, to restore the stomach and intestine to a normal condition, and to remedy the depressed nervous state.

The first indication is the most important to fulfill. It comprehends all pharmaceutical and other means for combating the development of toxins in the digestive tube, and for restoring tone to the alimentary canal. Among the pharmaceutical agents, the antiseptics, naphthol, salicylate of bismuth, etc., are especially useful. Dujardin-Beaumetz combines five grains of salicylate of bismuth with the same quantity of magnesia and bicarbonate of soda for one powder, to be given shortly before meals. Five grains of naphthol may be added to each powder.

Laxatives occupy an important place in the therapeutics of this malady; podophyllin, cascara, senna, sulphur, the purgative mineral waters are all recommended; the compound licorice powder is a useful preparation.

When the dilatation is considerable, lavage of the stomach by means of the siphon is indicated; putrescent matters are washed out, and the stomach is disinfected by boric acid solutions (1 per cent) or naphthol a, 1 per 1,000.

The dietetic treatment of gastrectasis comprises three indications: to reduce to the minimum the quality of liquid ingested; to introduce food into the stomach only when that organ is freed from the remains of a former meal; to introduce the smallest possible quantity of ptomaines with the food. The first indication is fulfilled by a dry diet; only half a pint of liquid with each meal; no drink between meals. Soups, broths, milk, champagne, etc., strictly forbidden. To meet the second indication, only two meals a day are allowed, the one at 10:30 A. M., the other at 7 P. M. No lunches. To meet the third indication, the diet should be mostly vegetable. Little or no meat; all meats to be thoroughly cooked. Toasted bread instead of plain bread, well-cooked vegetables, and fruit are permissible; eggs are unobjectionable.

To combat the neurasthenia, various me-

chanical means, as abdominal belts and supporters, have been advised by the School of Lyons. These help to support the dilated, misplaced abdominal organs. Hydropathy, gymnastic exercises, electricity, and massage give excellent results, but the stretched dilated viscera can not be restored to their primitive shape and volume. The patient can, however, be much more comfortable, the tone and action of the digestive tube can be improved, and the general health made better.—*Boston Medical and Surgical Journal*.

HYPOCHONDRIASIS.—Professor Mendel, in a lecture before the Association of Physicians at Berlin, defines hypochondria as a functional disease of the brain, the essential symptoms of which are fear and anxiety about the patient's own state of health. This disease appears, according to Professor Mendel, in three different forms. The simplest of these forms, for which the lecturer proposes the name of nosophobia, is when the patient considers himself seriously ill or near death. The second form shows not only the same fear and anxiety, but also various organic hallucinations. The internal organs have probably, like the extremities, a center in the cortex, and any irritation of this center will usually produce a special class of sensations, which in this case become hallucinations. The third form shows, in addition to all the foregoing symptoms, hallucinations of the higher senses. Patients believe their hearing and sight are getting worse; they also sometimes hear voices, as it were, within the head. The affection is, according to the course it takes, divided into acute, sub-acute, and chronic or constitutional hypochondria. Contrary to the general belief, it is very frequent among females of every age. Nosophobia is certainly much more frequent in man, probably because women act as nurses, and consequently have no fear of infection. The second form is very frequent among women, and is generally connected with the sexual organs. These patients generally come under the care of the neurologist only after having become much worse through unsuccessful gynecological treatment. The so-called cerebral form is most frequent. Patients say that their head feels as if it were in a vice, or that it is soft, empty, or too light, and that the spinal column can not support it. They are consequently in fear of apoplexy or insanity. The third form appears chiefly among women. Patients fancy themselves altered; when standing before a looking-glass they believe their faces to be wrinkled, etc. They fear that their means will become insufficient to live upon, that they will lose their place, and they suffer

from claustrophobia. Hypochondriacs are characteristically egotistic. This symptom is more prominent in women than in men. One woman kept her bed for twenty-five years without any disease, and committed suicide in bed. Generally, however, suicide is rarer in hypochondriacal women than in men. Sleep is usually good. Paresthesia and hyperesthesia are frequent, as are also cold feet, while the head is warm. Professor Mendel has frequently discovered a spot on the head of such patients which felt hotter to the hand than the rest of the head. In complications of hypochondriasis with other affections (hypochondria eum materiâ), Dr. Mendel teaches that the latter are the cause of the neurosis. Especially important is the complication with hysteria, which is generally the primary affection.—*London Lancet*.

A CASE OF DIABETES BENEFITED BY PHOSPHORUS.—As new therapeutical results are probably more often the result of chance than of design on the part of the investigator, I may perhaps be held excused in communicating to you what, so far as I know, is a new and somewhat important therapeutical fact; but which, whatever it may be worth, is as certainly not the result of any premeditated design on my part.

A man, aged sixty, was brought to me on October 9th by Dr. Williams Jones, of Manchester, who wished my advice as to his patient, who for a long time had been affected somewhat severely with eczema of his face, neck, and upper limbs, including his hands. Dr. Jones had previously consulted two or three other practitioners as to his patient's condition, and informed me that his patient, who had become much worn out from want of sleep, was now willing to do whatever might be required of him. Dr. Jones also informed me that his patient had long been affected with diabetes, for which he had treated him.

I suggested to Dr. Jones that, in addition to the local remedies which we agreed on, the patient should take phosphorus "perles" for the improvement of the eczema. To this Dr. Jones saw no objection. I accordingly proposed to him that the patient should take one "perle" three times a day for three days, and that, should no nausea result from their use by the end of that time, the dose should then be increased to two "perles" three times a day. Owing to some difficulty in obtaining the "perles," the patient did not commence taking them until November 1st, and after the expiration of three days Dr. Jones put his patient on the double dose.

On November 11th the patient visited me

at Dr. Jones' request, and certainly as to his eczema he is nearly quite well, and he tells me that he now enjoys sound sleep at night. This much I was quite prepared to hear. But I was a little astonished when he informed me that these were by no means the only benefits that he had derived. He was also greatly better of his diabetes, very suddenly and very markedly so. He says that for the last four or five days he has been far better in this latter respect than he has been for many months. He had been used to being obliged to get out of bed four or five times in the night to pass water; but, for the last four or five days, he had not had any call of the kind at night. The quantity that he passed in the twenty-four hours had for long been a very considerable quantity, but it had suddenly diminished in amount very notably. The urine has until quite recently been very pale in color, but now it presents a fairly natural degree of color. He suffered from constant thirst, which he was compelled to assuage frequently. He is now no longer troubled with thirst. He traveled this time from Manchester to London without wanting any thing to drink on the journey, and required to get out at Bedford only to pass water. He assured me that his first journey to me was by no means so free of incidents either as to incomings or outgoings of liquid. He stated that he felt now very much better in health altogether. I requested him to pass water just before he left, but he felt so little inclination that he doubted whether he could. However, he passed about six fluid ounces.

Although I had no reason to doubt Dr. Jones' diagnosis, I thought I would, before writing this note, obtain independent confirmation of the fact that the patient's complaint was beyond doubt diabetes. I accordingly asked my neighbor, Dr. Goodhart, to examine the urine for me. Dr. Goodhart, after remarking that the color of the urine was somewhat exceptionally good for a diabetic, found that its specific gravity was 1032, and that it contained plenty of sugar and no albumen. He has kindly permitted me to use his name for the purposes of this note so far as concerns these facts respecting the quality of the specimen of urine that I submitted to him.

The quantity of phosphorus that the patient took may be estimated from the basis that each of the "perles" contained one thirtieth of a grain of phosphorus dissolved in oil. So that, for the first three days of his phosphorus treatment, he took a tenth of a grain a day, and for the remaining seven

days he took a fifth of a grain daily. From such experience as I have in the administration of phosphorus internally, I should be disposed to say that he was fairly under the influence of phosphorus; moreover, he has just begun to experience a slight but decided degree of nausea from its use.

In what manner the phosphorus has acted in controlling the diabetes, as it seems to me it unquestionably has acted, I am not prepared to offer any kind of opinion. That the administration of phosphorus acts on the liver most decidedly is well known, because, in undue and over-prolonged doses, phosphorus is capable of producing fatty degeneration of the liver. This circumstance would seem to afford the clue to its marked action in this case in controlling diabetes, but I am not prepared to assert that this is the correct explanation. It is possible that the effect of the phosphorus may be due to its action on the nervous system.

In any case the circumstance seems to me well worthy of record in the columns of the Journal, because I venture to think that, when the question comes to be sifted by observers more competent than myself, it will be found that phosphorus exerts a very potent action in the control of diabetes.—*Balmano Squire, M. B., British Med. Jour.*

THE EFFECT OF DISTENSION OF THE ABDOMEN ON CIRCULATION AND RESPIRATION.—The effects of pregnancy, ovarian dropsy, ascites, and other diseases leading to great distension of the abdomen, in impeding respiration and disturbing the action of the heart, though there is little unanimity or precision in the opinions that are entertained respecting them, are generally admitted. Such affections are, indeed, of a chronic nature; the abdominal walls have time to yield, and the organs both in the abdomen and in the chest are enabled to accommodate themselves to the altered conditions; but we are not aware that any experiments have been undertaken to determine the effects of sudden distension of the abdomen in animals until the appearance of a paper by Dr. G. Heinricius, of Helsingfors, in a recently published number of the *Zeitschrift für Biologie*. It is generally believed that in pregnancy there is marked increase in the tension of the systemic vessels, and that as a consequence the heart undergoes hypertrophy; but although such statements are to be found in almost every gynecological text-book, the evidence on which they rest is extremely slender. In order to determine whether any obstruction to the circulation which

may exist in the uterine vessels in pregnancy would raise the general blood-pressure, Dr. Heinricius first performed the very simple experiment of tying the aorta just above its division into the iliaes, and found that in four rabbits no change took place in the arterial tension of the carotids. Hence no effect was to be expected from ligature of the uterine arteries, nor from any such obstruction as might proceed from their distribution in the pregnant uterus and in the placenta. He next proceeded to ascertain by experiment the effects of distension of the abdominal cavity in the rabbit and cat. He employed a double canula, which was introduced through or at the side of the linea alba by a small puncture in narcotized animals; one arm of the canula was connected with a vessel containing normal saline solution at the temperature of the blood, and the other with a manometer. Arrangements were further made to record graphically the respiration and the blood-pressure in the carotid. The respiratory and blood-pressure curves were taken after each 50 or 100 cubic centimeters of the solution had been injected into the abdomen from the vessel, and the phenomena which were presented proved to be remarkably uniform. In all the experiments, which numbered fifteen, it was found that the abdominal cavity could be filled with a large quantity of fluid, so that the parietes were quite tight, without either pulse or respiration being materially disturbed. It was only after very great distension had been produced that the respirations became more frequent and deeper, the expiratory effort being particularly well marked. This dyspnea was apparently attributable to the diaphragm being pressed upward and the capacity of the thorax correspondingly diminished, so that mechanical obstruction to respiration was occasioned. The effect of this was that the accessory respiratory muscles were brought more into play, and the breathing became more and more thoracic in character. But these efforts soon became insufficient to compensate for the defective action of the diaphragm. The respiratory center became excited, but was soon paralyzed by the venous blood. The respirations underwent a change; they became first shallow and slow, then deeper; dyspnea finally occurred, and the animal died. If we turn now to the effects of the distension on the circulation, we find that when the distension became considerable the pulse at first increased in frequency, then became fuller, afterward less frequent, and before the death of the animal usually

suddenly smaller. The arterial blood-pressure first began to rise when the frequency of the pulse had considerably diminished, and then gradually fell as the pulse became smaller. Dr. Heinrich gives, in the article we have alluded to, numerous tracings which collectively show that the abdomen may undergo great distension without abrogation of the more important vital functions. The abdominal cavity of a rabbit can support in this way the introduction of 500 cubic centimeters of fluid without difficulty, and nearly a liter and a half of fluid can be further injected before dangerous symptoms supervene, clearly showing how extraordinarily yielding the abdominal parietes are, and affording a proof that it is not necessary to appeal to the slowness with which they are distended in pregnancy and in cases of abdominal tumor to explain the slight interference with the main functions of life that occurs in those conditions.—*London Lancet*.

THE NECESSITY FOR A HIGHER STANDARD OF ACCURACY FOR TOXIC AND NARCOTIC DRUGS.—Show us a physician or pharmacist who has not been many times puzzled by the variable action of toxic drugs, indicating lack of uniformity in preparation, and such an one will be found to have had no practice in either art. While the question of standardizing preparations of toxic drugs is not a new one, and has been the dream of every progressive pharmacist and physician, practically it would seem difficult to determine just what standard of strength to adopt.

According to the Pharmacopeia, one cubic centimeter of a fluid extract represents one gram of the drug employed in making it. It is apparent that such a preparation, although made from the best quality of drug the market affords, will not be of invariable strength. In the purchase of this crude drug the quality must be largely judged by physical indications, which are often very deceptive. An estimation of the active medicinal ingredients is the only true criterion by which to judge the quality of a drug; and this is subject, even in carefully selected drugs, to a wide variation. Fluid extracts must, of course, share in this variability. It is this defect which is to be remedied.

That a pound of crude drug of good quality, properly manipulated, should produce a pound of fluid extract, seems a good basis for operations; but when the variability of crude drugs and the consequent variability of fluid extracts produced therefrom is known, one can not but look forward to the advent of the new pharmacopeia with the hope that

some uniform and more reliable method of standardizing fluid extracts upon some safer and surer foundation, by which a preparation must be produced that can be used with more confidence in its definite therapeutic value, may be adopted. Individuals and manufacturing houses have, in a measure, recognized the necessity for such a standardization, and have in the past in various ways endeavored to meet the requirements of the medical profession in this respect.

The result has been that there are already standardized preparations on the market, but these vary greatly in the strength adopted as the standard. There should be one only, and for this the Committee of Revision of the Pharmacopeia for 1890 should prescribe the process. To do this intelligently they should avail themselves of the work that has already been done in this direction; and this brings us naturally to a discussion of this work.—*Medical Age*.

THE ANTISEPTIC FUNCTION OF THE GASTRIC JUICE.—Professor Kast, the director of the new General Hospital, Hamburg, writes on this subject in a "Festschrift" on the occasion of the opening of the hospital. Spallanzani showed a hundred years ago that the gastric juice has an antiseptic influence, and it has since then been proved by N. Sieber, C. Schmidt, and others that this influence is due to the free hydrochloric acid which it contains. The investigations of Baumann have shown that in healthy subjects the aromatic bodies found in the urine are due exclusively to intestinal decomposition, their amount, as united with sulphuric acid, being in a direct relation with the amount of the products of decomposition in the intestines. In Professor Kast's experiments the exact relation of the ether sulphates to the other sulphates in the urine was ascertained by daily examinations, a uniform diet being given, and then copious alkalies were supplied in the food, so as to neutralize the gastric HCl; and the effect of this on the ether sulphates of the urine was examined. The conclusion is arrived at that the antiseptic function of the gastric HCl is its chief function, while its digestive function is a subordinate one. This is only true so far as the products of ordinary decomposition; the case is different with the pathogenic bacteria, many of which are highly resistant organisms. We have no means at present of estimating the amount of the chemical products due to the vitality of pathogenic organisms in the intestine. It is true that Brieger regards the diamines as due to pathogenic

bacteria. But the diamines are a direct product of such bacteria, not, like the aromatic bodies found in the urine, formed from a previous substratum due to bacterial activity. Moreover, we have no clear ideas on the transition of such diamines into the urine. Hence, at present we have only to fall back on the physiological action of pathogenic bacteria as an index of their existence. Bannmann's and von Udransky's quantitative estimate of pentamethylene diamine (Brieger's "putrescin") in the urine, but originating in the intestine, constitutes the latest advance in this direction.—*British Medical Journal*.

PYOSALPINX AND LAPAROTOMY.—In some clinical remarks recently published by Dr. Richelot in *La Semaine Médicale* (and commented on by Mr. Verchère in *La France Médicale*, No 124) the indications and contra-indications for laparotomy in pyosalpingitis are pointed out. These, he says, largely depend on the duration of the disease. A simple acute or subacute salpingitis may get well spontaneously or by simple means, while it is as much an abuse to remove an ovary simply because it is inflamed as it would be to castrate for orchitis. In his cases an interval of two years from the onset of symptoms is, *ceteris paribus*, allowed to elapse before removing organs which by that time would have become useless. Severity and constancy of pain, especially in laboring women, would perhaps justify interference. Of course, wherever the presence of pus can be found, surgical interference is called for, to obviate pelvic peritonitis and worse evils. The advice of some surgeons to wait for the spontaneous opening of the abscess is deprecated, and so is the proposition (in imitation of the usual course followed by nature in spontaneous cures) to operate through the vagina rather than directly through the peritoneum. *London Lancet*.

HERNIA AND DISEASE OF THE UPPER AIR-PASSAGES.—Dr. W. Freudenthal read a paper on this subject at the meeting of the American Medical Association, at Newport, Rhode Island, last June. He stated that of 500 subjects with abdominal hernia who had passed under his examination, 143 were subject to marked disease of the upper air-passages that made surgical interference absolutely necessary. Among about 80 members of a family, also examined by Dr. Freudenthal, almost all had diseases of the upper air tract and one third had herniæ. Where

nasal diseases are less frequent there also less herniæ are found. According to the frequency of diseases of the upper air-passages, hernia was found in 50 out of 1,000 conscripts in the United States, in 22.89 in France, in 16.61 in Italy, in 14.09 in Austria-Hungary, and in less than 14 out of 1,000 conscripts in the German Empire. Hard physical work, such as lifting weights and ascending mountains, never gave a predisposition to hernia. On the other hand, sedentary occupations and certain causes which predisposed men to post-nasal catarrh and other diseases of the upper air-tract decidedly, on that account, predisposed to hernia. In women hernia was rarer than in man, on account (according to Dr. Freudenthal) of the weaker stress used in pressing down the intra-abdominal contents during the act of hawking or clearing the throat.—*British Medical Journal*.

CODEIA IN GYNECOLOGICAL PRACTICE.—Dr. Freund, of Strasburg, who was induced by the favorable opinion of Professor Schröder on the suitability of codeia for the treatment of pain in diseases of the female genital organs to give it a trial, has published the results of his experience in the *Therapeutische Monatshefte*. He remarks that Dr. Lauder Brunton's testimony to the value of codeia in pain affecting the lower portion of the abdomen must be accepted in gynecological practice with considerable limitations. He found that pain originating in the uterus, and depending upon either acute or chronic affections of that organ or upon dysmenorrhea, was only affected in a very transitory way by codeia, and never to nearly the same extent as by opium or morphia. Extensive effusions, too, into the pelvic peritoneum or into the cellular tissue were but little improved by codeia, and the same might be said of diseases of the tube. On the other hand, however, he found that it exerted a true, unmistakable, and immediate effect upon pains of all sorts having their origin in the ovaries, whether there was displacement, prolapse, ovaritis, peri-ovaritis, or the so-called "ovarian neuralgia." In all these cases codeia, even in small doses, appeared capable of exercising a marked control over the pain, and in many cases of arresting it altogether. Of course, suitable local and dietetic treatment was applied simultaneously. As to the doses given, the usual plan was to order a pill containing half a grain of codeia, made up with gentian and liquorice, to be taken three times a day. Occasionally larger doses had

to be given. In no case, however, was any unpleasant effect observed, and there were no signs of any cumulative action, some of the patients taking these pills for a month. *London Lancet.*

ANGINA PECTORIS CAUSED BY COMPRESSION OF THE SYMPATHETIC NERVE.—From the majority of dissections, it has been found that the cause of angina pectoris is in all probability an irritation of one of the three nerves which assist in respiration: the phrenic, the vagus, and the sympathetic nerve; and, as a rule, the seat of the trouble is in the thorax. An exception to this rule was observed in the following case, which is reported in the *Deutsche Medizinische Zeitung* for August 1st, by Dr. Humbert Mollière.

The patient, a man fifty-nine years old, who for ten years had been troubled with a cough, and two months before had had profuse diarrhea with pain in the abdomen, and was greatly emaciated. In conjunction with the cough, he was also troubled by frequent and long-continued attacks of angina pectoris of a most severe form. Upon physical examination he was found to be suffering from bronchial catarrh, but no abnormal condition of the abdomen was found. For the next few days the attacks became much more frequent, and the patient rapidly lost strength, and finally succumbed while suffering from an acute attack of the angina, in spite of all that was done to relieve his sufferings.

At the autopsy it was found that the mesenteric and the prevertebral nerve ganglions had undergone cancerous degeneration, and that portion of the sympathetic nerve between the stomach and the pancreas was surrounded and compressed by a carcinomatous mass of lymphatic glands.

Emphysema was found in both lungs, as well as secondary carcinomatous nodules. The bronchial and pulmonary nerve ganglions were entirely intact, the ends of the vagus and phrenic nerves extended to the solar plexus. This last was compressed in such a way that it was undoubtedly from this cause that the angina had proceeded. It is most probable also that in an analogous manner an irritation of the ends of the sympathetic nerve, which are in the mucous membrane of the bowels, would also give rise to angina pectoris.—*Medical and Surgical Reporter.*

AN INTERESTING OPERATION.—A unique medical phenomenon, a native wing-membrane, which Professor Julius Wolff, of Ber-

lin, has observed in a girl of nine, is being much discussed here at present. Between the thigh and the lower part of the child's left leg extends a peculiar formation, such as is found only between the upper and fore-arms of the wings of birds, and which Professor Wolff therefore calls "wing-membrane." Three of the fingers of the child's right hand are webbed together, and her right leg terminates in a club-foot of the most pronounced character. The "wing-membrane," which is eighteen centimeters long and two centimeters thick, and covered all over by normal skin, is a smooth continuation of the soft parts, and the knee-joint could never be stretched, but only bent to a right angle, so that the girl could only move about on her knees. Professor Wolff resolved to make it possible for her to walk erect by removing the club-foot and cutting the wing-membrane through. The first of these two operations succeeded easily, with the help of water-glass bandages; but the second proved very difficult, and had not the desired effect. A year elapsed before the wound was healed and the possibility of stretching the knee-joint completely attained. The little girl is now able to walk erect without stick or crutch, and to go to school. Her gait is, of course, awkward, for the left leg is about twelve centimeters shorter than the right one. Professor Wolff's success is regarded as a decided triumph of surgical skill.—*London Lancet.*

TREATMENT OF ASTHMA.—Within a recent period we have noticed in our exchanges many articles on the treatment of asthma. As to the remedies recommended for this disease, there is no end. With no intention of deprecating the value of several old and well-tried remedies, we shall only refer to agents which have recently forced themselves to the foreground. Of these, perhaps citrate of caffeine stands first. The dose is 1 to 5 grains dissolved in warm water. It does not appear to be a very dangerous agent, since, in one instance, a patient took 60 grains by mistake, without fatal consequences. Caffeine is said to afford very prompt relief. Arsenic, in the form of 2 or 3 minims of Fowler's solution, is reported as making striking cures in appropriate cases. Arsenic has the peculiar property of supporting respiration, as, for example, in making ascents. Its beneficial effect in asthma is no doubt due to this property. Iodide of potassium is sometimes combined with Fowler's solution. A valuable combination in the bronchitic form is iodide of potassium and carbonate of ammonia. Chloral hydrate, either

alone or in combination with bromide of potassium, is also followed by excellent results in certain cases. Cocaine in doses of $\frac{1}{6}$ of a grain of the muriate, given in the form of tablets, has been very highly recommended for the relief of the spasm. In the form of stagnant respiration, with congested lips and nose, and cold extremities, strychnia has been found highly useful. The liquor may be given in doses of from 3 to 5 drops, with dilute phosphoric acid. When defluction from the mucous surface is very profuse, belladonna probably answers best. Medium doses should be given every four hours. Grindelia robusta a short time ago was largely used, but failed to come up to expectations, and is now much less used. Quebracho is also a remedy in much repute.

We occasionally meet cases of continued distress, despite the use of ordinary means. In these cases there is usually much bronchial tumefaction and dryness. In cases of this class nothing can equal $\frac{1}{4}$ grain of pilocarpine with $\frac{1}{4}$ grain of morphine, administered hypodermically. The relief is prompt, the tumefaction subsides and is followed by profuse expectoration. As to change of climate, experience shows that the asthmatic should not seek a dry atmosphere. A warm, moist atmosphere is the most suitable. In mild cases a mere change from one locality to another may create immunity from this harassing trouble.

The remedies here mentioned, which are culled from a large number of remedies in use, seem to be the ones most relied on at the present time. It must not be understood that the remedies in this list are to be depended upon in symptomatic asthma, when the condition is merely a symptom of a disease usually of a much graver nature. The bronchial muscles are here in a normal condition, some probably serious organic trouble being the cause of the symptom, and requiring a separate treatment, as indicated by the pathological conditions.—*The Canada Lancet*.

INVOLUNTARY AUTO-INOCULATION OF GLANDERS.—A painful case was reported by the Vienna correspondent of the Daily News, on the 28th ult., of the death of a young physician, Dr. Hoffmann, from glanders, under the following circumstances. In August a man suffering from glanders was admitted into the General Hospital, and Dr. Rowalski studied the case bacteriologically, isolating the bacillus cultures, of which he gave to Dr. Hoffmann, who was skeptical as to the transmission of the disease by inoculation of the cultures. The latter's experiments made with the cultures, however, convinced him of their continued virulence.

In the beginning of October he took cold, and had severe pain in the side, for which he had recourse to morphia injection, using the same syringe he had employed in his experiments. The syringe had been heated to redness, and was thought to have been thus thoroughly disinfected; but that it must have retained some of the virus in an active state seemed to be proved by the melancholy sequel of the unfortunate physician becoming infected with glanders, from which he died. The account forwarded to the Daily News is circumstantial, although somewhat sensational. Assuming the facts to be as related, the moral of the case is obvious, showing the disastrous consequence of a thoughtless use of the same instrument as that employed for experimental inoculations and hypodermic medication. It demonstrates also the virulence of the glanders poison, and suggests the difficulties that may beset experimenters in ridding their instruments of all traces of the virus with which they deal.—*London Lancet*.

PREVENTION OF ATTACKS OF MIGRAINE.—Dr. Hammerschlag, according to the *Allgemeine med. Central Zeitung*, No. 39, employs the following combination of remedies for the prevention of attacks of migraine, and states that hitherto it has not failed him:

Caffeinnæ citrat.....gr. xv;
Phenacetin.....gr. xxx;
Sacch. albi.....gr. xv.

M. Fiat. pulv. Dis. in capsulæ No. X.

Sig: One capsule to be taken, in the intervals of the attacks, every two or three hours.

Phenacetin, he says, does not act so promptly when given alone. This treatment may be kept up until a decided remission occurs, and this does not have to be waited for long.—*Wiener Med. Presse*.

THE GUINEA-WORM IN EUROPE.—The guinea-worm, or *filaria medinensis*, is not usually seen in northern Europe, but of course European travelers or natives of some Asiatic or African countries may bring it. A Brussels practitioner, Dr. Robinet, has recently had two patients suffering from this parasite among the members of a troupe of negroes from Accra, on the Guinea coast, who have been performing in Brussels this year. In both cases the worm was in the leg, and was removed in due time, after the cautious opening of the pustule which it produced, by the process of winding it very gently round a match.

The American Practitioner and News

"NEC TENUI PENNÂ."

Vol. IX. SATURDAY, JANUARY 4, 1890. No. 1.

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H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the EDITORS OF THE AMERICAN PRACTITIONER AND NEWS, Louisville, Ky.

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THE INFLUENZA.

Early in December the fact that the people of St. Petersburg were in the grip of the time-honored epidemic, acute catarrhal fever, was telegraphed over the world, since which time it may be said that the "*Genius Epidemicus*" has successfully divided the honors of the season with Santa Claus. The disease soon made itself felt in Vienna, then in Paris, later in Boston and New York, and now, if we can credit reports, some of the western cities are under the pandemic spell. If we read the signs of the times aright, the ster-nutatory influence will soon encircle the globe, and for a time it may be said that the sun never sets upon the sneezers.

To date there has been little in current medical literature relative to the coming plague. The daily papers have devoted liberal space to its discussion, but, as is usually the case, the articles have been sensational and of little scientific worth. But the disease has, in fact, a voluminous bibliography. Thus Zuelger, who devotes a classic article to the subject in Ziemssen's *Cyclopedia of Practical Medicine*, says that "the literature of influenza has reached such an extent that we must renounce the idea of presenting it in this place." Nevertheless he gives the titles

and authors of nearly fifty articles. With one exception (a learned editorial in the *British Medical Journal* of December 7, 1889) the medical journals have made only brief references to the epidemic. It may, therefore, be well, in view of its near approach, to pass in review some of the practical points involved in the study and management of the disease, our source of information being as above mentioned.

(1) The disease is nothing new, it having been traced through a series of ninety epidemics. The first appeared in the year 1510, and the last in 1870. (2) Its names are old. The Italians call it *influenza* (something fluid, transient, or fashionable); the Germans, *mode-fieber* (fashionable fever), *blitzkatarrh* (lightning catarrh), *schafts-husten* (sheep-cough), etc., and the French, "*la grippe*," from *agripper* (to seize). (3) It is not properly called the "Russian" influenza, since it is indigenous to no known part of the world. In Russia it is called the Chinese influenza, while in the Orient it has been accused of coming from still further east—the sea or the continent beyond. The first epidemic described started at Malta and spread to the northwest over all Europe.

It does not always pursue a line of march like other epidemics, but may be found simultaneously in two or more places in both hemispheres, with, of course, exactly opposite conditions of climate, temperature, etc. (4) It is no respecter of persons, nor is it subject to any known hygienic conditions. (5) Though generally a mild and manageable disease in the middle-aged and healthy, it is liable to develop serious lung and nervous complications; for example, pneumonia, cardiac weakness, adynamia, etc. Old persons and young children, the phthisical, the asthmatic, and those who have been weakened by any chronic disease are in great danger.

In the epidemic of 1580 the disease claimed nine thousand victims in Rome alone, and "Madrid must have been almost depopulated by it." To the doctors (blood-letting [?]) was charged this great mortality. (Query: Was Dr. Sangrado alive and in

Madrid at that time?) In uncomplicated cases the disease commonly ends in recovery. The epidemics last, as a rule, from four to six weeks. (6) The connection of influenza with cholera is without scientific foundation; nevertheless the epidemic of 1831 preceded cholera, and that of 1837 followed after the disease. Cholera is now prevalent in Persia, and may spread over Europe on the heels of *la grippe*.

(7) The following, from a St. Petersburg correspondent of the British Medical Journal, is a good description of the disease as manifest in the present epidemic:

"It is frequently spoken of in the lay papers as influenza, but the typical symptoms of this disease are far more frequently absent than present, and the only features in common are the rapid course, the extremely rapid spread, and the frontal headache, the great running at the nose and eyes being absent in all the cases that I have seen. The two most prominent symptoms in the present epidemic are those of high temperature and great frontal headache, accompanied in many cases by pain in the eyeballs, and in all by foul tongue and breath, constipation, and general malaise. The onset is rapid, the temperature running up at once to 39°, 40° C., or even higher. The pulse in those cases I have seen is not raised proportionately with the temperature. In some cases there are added the symptoms of catarrh of the nose and frontal sinuses, in others there are sore throat and catarrh of the deeper air-passages, and in many there are vague rheumatic pains about the back, shoulders, and limbs. The duration is short, averaging from three to five days, though sometimes prolonged to six or eight days, or even longer, and convalescence is rapid."

The above description would seem to indicate that the disease is of mild type. It is probably much nearer the truth than the accounts which have come into the public prints from Paris.

(8) The cause of the disease is a riddle. Dr. Seifert, of Würzburg, believes it to be due to a specific microbe which he thinks he has found and has named influenza-coecus.

The microbian theory of the affection is not to be sneezed at, but Dr. Seifert must prove his point. In view of the ultra pandemic character of *la grippe*, we wonder that some philosopher has not traced its etiology to the macrocosmic dust of the astronomers.

(9) The treatment of the disease is to be based upon accurate medical knowledge and common sense.

Notes and Queries.

HYGIENE AND SUNDAY.—Among the questions treated of at the recent congresses in Paris, that of the observance of the Sabbath as a day of rest was not the least interesting. The Congress on this subject was presided over by M. Léon Say, who remarked that this rest, which several religions rendered obligatory, is a law of nature, and consequently a law of hygiene, the excellence of which has long been demonstrated, although it is not to be found in all national codes. The resting on the seventh day is of Biblical origin, and the custom of counting the days by seven was formerly the rule among the most diverse races—in India, as among the Celts, in China as well as in Arabia. Now that hygiene has become a positive science, it confirms the moral and material necessity for a temporary rest on the seventh day. The idea was adopted in principle by all the members of the Congress, which received the patronage of two political celebrities, Mr. Harrison, President of the United States of America, and Mr. Gladstone. In a letter, which was read publicly, President Harrison declared that he considered that all workers, whether with the hands or with the head, were in need of rest, which alone can guarantee the general observance of the Sabbath. Mr. Gladstone declared that he attributed his robust health and longevity to his invariable observance of the Sabbath rest. Several reports were presented to the Congress, and physicians, professors, philosophers, and hygienists are in accord on this point. All, without exception, support for workers of all classes and of all ages a weekly day of rest, which should even be made obligatory. It may here be noted

that in 1881 this subject was open to competition by the Swiss Government for a prize, which was awarded to Dr. Niemeyer, of Leipzig. The subject was brilliantly treated by Dr. Niemeyer, who observed that the Dominical rest is the first commandment of hygiene, which should be followed to obtain a peaceful and continued amelioration of society, and in this respect it is as much a rational institution as a religious one. The following is the summary of the conclusions voted by the great majority of the members of the Congress: "Rest on Sunday is possible in varying degrees in all industries. Sunday is the day which best suits the employer and employed, both as regards the individual himself and his family, and it is well that the day of rest should be, as much as possible, the same for all. When the Sunday rest is impracticable for certain reasons, it should be replaced by some other day, so that the workmen may have fifty-two days' rest in the year, as equally divided as possible. This rest permits man to produce considerably more and better work, inasmuch as it contributes to maintain his zeal and to restore his physical forces."—*London Lancet*.

EPIDEMIC INFLUENZA.—At present the administration of the various governments of Europe, say the press dispatches, is completely demoralized by the prevalence of the influenza, and business of every kind is only carried on there under the most serious difficulties. Convicts have had to be put back because the judges were too ill to sentence them; more than half the postmen are prevented by sickness from attending to their duties. In one continental regiment alone forty per cent of the men were placed *hors de combat* in a single day by the ailment. Theatrical stars fail to rise at night, or in the morning either, for the matter of that. Marriages and all other kinds of ceremonies and entertainments excepting funerals have to be put off. In Paris the employes of all the great retail dry-goods stores have been seized with "*la grippe*," as the French style the malady, no less than 670 cases having been reported on Wednesday in one establishment alone. The notion of 670 saleswomen and salesmen, all sneezing and

coughing simultaneously in one shop, is something too awful to contemplate. Indeed, the paralyzing effects of the present epidemic can only be compared to those which occurred one hundred years ago, when, as a contemporary remarks, two great British fleets under the command of Admirals Lord Anson and Kempenfeldt were obliged to suspend their hostile operations on the French coast and to return to Spithead, owing to the men being completely disabled by influenza. Under the circumstances, it is to be hoped that our squadron of evolution, which has just sailed from Boston for European waters, may escape such a visitation. Most European capitals are now experiencing it with more or less severity.—*Boston Medical and Surgical Journal*.

A VENERABLE SOCIETY.—The Medical Society of the State of South Carolina celebrated its one hundredth anniversary at Charleston, December 9th, by an oration in South Carolina Hall by Dr. Kollock, followed by a dinner at the Charleston Hotel.

The Medical Society of South Carolina ranks among the oldest of its kind in America, the three older than it being the New Jersey State Medical Society, founded in 1766, Massachusetts Medical Society, founded 1781, and the College of Physicians, Philadelphia, founded 1787. The initiatory step in the founding of this society was taken by Dr. Peter Fayssoux. Dr. David Ramsey, the famous historian, and once president of the Continental Congress, and Dr. Alexander Barron were among the first members. The meetings were held at Williams' Coffee House and at Harris' Tavern, and were marked by a convivial flow of spirits of various kinds. As Dr. Michel, the historian of the Society, has remarked, the object of the organization was charity, and from this society as a parent have sprung the most noble charities of the city of Charleston.

For sixteen years its members maintained a voluntary personal dispensary system for the poor. The Shirras dispensary system of the city physicians, Roper Hospital, and other institutions, quickly followed, and also later the Medical College. The Humane Society was another beneficial organization which took its

origin in this society, and the Botanical organization, founded in 1805; also the Esculapian Society of Union District.

This society published one of the first medical journals published in America, The Carolina Journal, edited by Drs. Thomas Y. Simons and William Michel, published in 1822. The Southern Medical and Surgical Journal originated with Drs. J. Lawrence Smith and S. D. Sinkler, in 1845.—*Boston Medical and Surgical Journal*.

DEATH BY ELECTRICITY.—The coroner's jury in the case of Harris, the Eighth Avenue salesman, who was killed by an electric light wire coming in contact with a show-case which he was assisting in carrying, has rendered a verdict which finds the Brush Electric Light Company wholly responsible for Harris' death. The finding also makes the following recommendations: (1) That the Board of Electrical Control and the Board of Health be requested to use extraordinary and speedy measures to have the wires of all the electric light companies of the city laid under ground. and, (2) that the said boards use all necessary care to have the wires and lamps of the electric light companies properly insulated.

ANTIPYRIN HABIT.—To the already long list of drugs, the use of which, under proper restrictions, is both beneficial and proper in combating the various ills to which flesh is heir, but whose abuse becomes a curse to humanity, another has recently been added. Scarcely have we learned to properly use antipyrin than the tocsin of alarm must be sounded against its abuse. The recent discovery of its value as a nerve tonic places it on the list with morphine, chloral, cocaine, etc., so seductive is its gentle, soothing influence upon the overstrained nerves. Its victims are already found, especially among society women, whose nerves, strung up to a high pitch by the overwhelming demands of a winter season of gayety, seize eagerly upon any thing that will afford relief from the headaches and other disorders arising from prolonged fatigue and overtired nerves. So pleasing is the effect that it is soon used

for every trifling ill feeling, until the patient finds herself unable to live without it, and the fascinating "antipyrin-habit" is formed. Properly used as a nerve-tonic, its effects are admirable, but abused, the victim becomes even more hopelessly entangled than the morphine or cocaine victim. The effects vary with the dose. In large doses it produces complete relaxation with loss of reflex action. In moderate doses, continued, it induces convulsions. As a stimulant its effect is much like that of quinine.—*International Dental Journal*.

A LEPER IN COURT.—James Brennan, of St. Louis, is a prisoner at Quarantine, and has been pronounced a leper. His friends do not believe the diagnosis to be correct, and several days ago petitioned for a writ of habeas corpus in order to secure his release. Health Commissioner Dudley was ordered to bring the body of Brennan into the Circuit Court, but it was supposed that the letter of the injunction would not be obeyed, and that the case would be settled on evidence and argument. To the horror of a packed court-room, the leper was brought in. He presented all the symptoms of the disease, and half the people rushed out of the room, Judge Valaint took one look at Brennan, and ordered him back to Quarantine in the custody of the city.—*Boston Medical and Surgical Journal*.

At its September meeting the Virginia Medical Examining Board received twenty-six applications for examination. Sixteen were rejected, two withdrew, and eight were given permits to practice medicine. The low-grade medical schools should advise their graduates not to appear before this Board.—*Record*.

LONDON is to have post-graduate courses from the combined material offered by the Brompton Consumption Hospital; the Hospital for Sick Children, Great Ormond Street; the Hospital for the Paralyzed and Epileptic, Queen Square; the Moorfields Ophthalmic Hospital; and the Hospital for Diseases of the Skin.—*Boston Medical and Surgical Journal*.

PRIVATE ESTABLISHMENTS FOR THE CARE OF THE INSANE IN NEW YORK STATE.—The following resolution was recently adopted by the State Commission in Lunacy:

“Resolved, That hereafter no license for the establishment and keeping of an asylum or institution for the care, treatment, or custody of the insane or persons of unsound mind, for compensation or hire, shall be granted except to a duly qualified medical practitioner of recognized professional skill and standing, who is a graduate of a legally incorporated medical college, and has had actual experience in the care and treatment of the insane.”—*Med. Record*.

THE French Government has decided that hereafter foreign physicians (more especially English) will not be allowed to practice medicine in France, except “in those instances presenting very exceptional claims.” This means that the English physicians can no longer undertake to practice in the Riviera, or at the various Mediterranean health resorts of France. If this rule is to be made to apply to Americans, it would be only fair to undertake reprisals. There are a good many French physicians who come over to practice in this country, and it is a poor rule that doesn’t work both ways.—*Ibid*.

EXPECTANT practitioners report that they are beginning to reap the first fruits of the European epidemic influenza, both in Boston and New York. Certainly there are many bad head-colds, affecting in some cases several members of a family or a business community; but health authorities are not quite yet prepared to affirm it to be an imported rather than a domestic product.—*Boston Medical and Surgical Journal*.

THE American Academy of Medicine has so amended its constitution as to permit the Academy to admit as members those of the profession who have pursued courses of study calling for an equivalent of mental training to that necessitated in the securing the degree of A. B.

A CASE OF POISONING FROM ANTIPYRIN.—Panschinger reports (*Centbl. für Gyn.*) a case of poisoning by antipyrin in which a new symptom was observed, viz., profuse diarrhea, which set in a few hours after the last dose was taken. In all five grams were taken, one every hour. Aside from the diarrhea, the principal symptom was the usual collapse. The patient recovered in ten days. The medicine was obtained from an apothecary, and without a prescription.

CRUSADE AGAINST ALCOHOLISM.—The Government of Belgium has decided to combat, as far as possible, the progress of alcoholism. After demanding and obtaining from Parliament a law permitting the exaction of a license fee for new public houses of a greater or less amount, according to the population of the locality, it has also raised the subsidy which it grants to the Patriotic League Against Alcoholism from 500 to 1,000 francs.

A PAIR OF FORCEPS LEFT IN THE ABDOMINAL CAVITY.—Two prominent surgeons in Pittsburgh are charged with having left a pair of forceps in the abdominal cavity of a woman after a laparotomy. The presence of a foreign body was discovered by another surgeon, whom the patient had called in, and the wound was reopened and the forceps removed by him.

THE JOHNS HOPKINS HOSPITAL BULLETIN is the title of a monthly publication issued under the auspices of the Johns Hopkins Hospital, and containing the proceedings of its Medical Society and various official announcements.

DEATH UNDER ETHER.—At Bellevue Hospital a death under ether, used as an anesthetic, recently took place during an operation for abscess in the neck. At the autopsy the kidneys were found to be diseased through cystic degeneration.

THE sum of \$800,000 has been bequeathed by the will of the late Mr. J. H. Schoenberger, to found a hospital for incurables at Pittsburgh, Pa.

ABORTING ABSCESSSES.—Apply a yeast poultice to the affected parts, upon which equal parts of borate of soda, boric acid, salicylic acid, and powdered tannin should be dusted.

A moderate dose of calomel should be given internally. This treatment is usually sufficient to abort an abscess if it is resorted to when the local symptoms first make their appearance.

Frictions with the following ointment will also be found valuable (Medical and Surgical Reporter):

Salicylate of bismuth.....3ijss;
Lanoline.....3vijss.

FATAL SUPERINCUMBRANCE.—The deaths of fourteen infants in London, in one week, were attributed to "overlaying." The cause of one death in New York last year was reported to be "Sat on by Father."

DR. HANS VIRCHOW, Privatdocent in the University of Berlin, and Prosector in the Anatomical Institute, has been raised to the rank of Professor Extraordinarius. Dr. Hans Virchow is a son of the celebrated pathologist.

A DETROIT physician, who is dying from necrosis of the frontal bone, is reported to be watching his own case without other professional aid, taking copious notes of the symptoms, etc., as they appear.

THE death-rate in New York, ending December 15th, was the lowest ever reached, being only 18.20 per cent per 1,000 population.

THE Corporation of Dublin had adopted the Infectious Diseases Act, which compels notification of contagious and infectious diseases.

SPECIAL NOTICES.

Dios Chemical Co., The treatment of abortion is a subject of great importance, because it is one which is always with us, and the careful handling of the case often saves the patient from long and troublesome as well as dangerous sickness. Of great interest to me is a case which happened recently in my practice. I was called to see a woman who was seven months pregnant with her third child. She was suffering from pains and seemed to be on the verge of aborting. I prescribed "Dioiviburnia" in doses of a dessertspoonful four times a day. The threatened abortion passed off

and I was not again sent for until a month elapsed, when I found her in the same condition as before, suffering very much pain. She begged me for the medicine which had done her so much good on a former occasion, and I gave it to her in the same dose with a like result. On delivering her at full term of a fine boy, she volunteered the confession that she had on both occasions mentioned made desperate efforts to produce an abortion, and only sent for me when her suffering became unbearable. I have also had marked results from this remedy in other cases, but the one here presented is of the most interest. I shall continue its use.

E. S. M'KEE, M. D.,
Secretary Mississippi Valley Medical Society.

CINCINNATI, OHIO, October 29, 1889.

THE report of the New York Analyst of Drugs shows that the chances for getting drugs of good quality on prescription is 43.8 per cent; fair, 17.4; inferior, 26; NOT AS CALLED FOR, 11.6; excessive strength, 1.2.—(*Times and Register*, Philadelphia, December 7, 1889.)

VEGETABLE ALTERNATIVES.—Mercury and iodide of potash, separately or combined, has been the sum total of treatment, it may be said, in serious blood disorders as far back as our knowledge extends, and the patient was fortunate indeed if, in being cured of his original disease, he escaped the constitutional effects of mercurials and iodides. That a purely vegetable medicine should be discovered which in all useful qualities supplants mercury and iodides in these cases, and at the same time is so devoid of injurious effects that it may be taken in any quantity and for any length of time without harm, is certainly of great importance.

The experience of the past six years establishes beyond a doubt that SUCCUS ALTERANS (McDade) is such a discovery, and, although Dr. J. Marion Sims had good grounds upon which to base his statements made in the *British Medical Journal* in 1882, still he "built better than he knew," and it is doubtful if the great surgeon, in teaching the professional world his wonderful operations, ever performed a greater service than in bringing this remedy to the knowledge of his professional brethren. The good effects of succus alterans (McDade) in all diseases of the blood, whether due to some deleterious influence introduced from without, or generated within, are unmistakable, while it seems no less useful in impoverished conditions of the blood and diseases arising therefrom.

The highest authorities unite in support of these views, and confirmatory reports are daily passing into medical history.—*Mass. Med. Journal*.

It was in 1844 that the now well-known Aperient called "Tarrant's Seltzer" was prepared for the use of the coterie of physicians which composed the staff of the New York Hospital, and from that time to the present it has been a favorite saline with physicians of all schools.

It is not only a most palatable and safe Aperient, but is now extensively used as an antacid in Gouty or Rheumatic Diathesis and as a vehicle to administer the Salicylates, Lithia Salts, and Tincture of Iron.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., JANUARY 18, 1890.

No. 2.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

THOUGHTS ABOUT WRITERS ON PHTHISIS- IS PULMONALIS.

BY EWING MARSHALL, M. D.

Assistant to Chairs of Materia Medica, Therapeutics, and Public Hygiene, and the Practice of Medicine, Medical Department University of Louisville.

For a long time there has been growing in my mind a complaint against the great authorities and experimenters of the world. The recognized greatest scourge and destroyer of mankind is phthisis pulmonalis in its various forms, and the medical world is more open to suggestions on this subject than any other.

The world at large seems aroused, as evidenced by the attention given to it by the Diet of Bavaria.

Now, the complaint is not that there is not enough written on the subject, for it certainly occupies a goodly proportion of space in every medical journal, but that the two horns of the dilemma (the cause and the cure of the disease) employ writers to the exclusion of what seems to be equally deserving of attention, the course of the disease. Dr. Cornet, of Bavaria, in his report on tuberculosis, seems to have added nothing new and expressed nothing original, except the thought that he denies the theory of the hereditary tendency in tuberculosis. This has put the whole Bavarian faculty "by the ears."

An exhaustive and able paper by Dr. McGahan was read before the Mississippi Valley Medical Association this year (published

in the American Practitioner and News) on the subject, "Modern Treatment of Pulmonary Phthisis," in which he alluded to most of the latest fads. But what impressed me most was the light way in which men of such great repute as those referred to by him treat such a subject.

All mankind would rise up and call him blessed who should discover either the cure or the means of warding off this baneful disease. And yet if any man, who has made a name, experiments for a few months only with any drug in the treatment of phthisis, and reports that under its use many cases improve, the discovery is immediately announced of the long-wished-for panacea. As a rule, other prominent men find during the first month or so of its use a similar improvement in their cases, and they hasten to write reports to the same effect, so that their names may be associated, to their profit, with the new treatment.

Now, here is the point of this article. Why do these men on such short trial announce a remedy, when they must know that it is the nature of a great proportion of cases of phthisis to progress in more or less regular stages?

After a sharp decline in the initial stage, with almost any medication in conjunction with improved hygiene, dietary, and gentle exercise, the patient will improve, only to have a second siege, and then to improve again, etc. As is well known, a very small percentage of deaths from phthisis occur in the first attack.

In view of these facts, would it not better become the profession to spend more time in the study of the natural history of this disease, that it may be better known than it is at present?

Let these great experimenters who have many cases at their disposal place a number of them, say a hundred, in finely ventilated apartments, giving them good diet, and see if they will not progress pretty much in the same way as a hundred others under the same conditions, having in addition any of the so-called cures suggested to date.

It is the opinion of the writer that a better knowledge of the natural history of the disease would not only give some new suggestions as to the means of prophylaxis and cure, but also would prevent these, to say the least, undignified announcements of untested cures.

LOUISVILLE.

TWO CASES OF PUERPERAL TETANUS.*

BY JOHN A. OUCHTERLONY, A. M., M. D.

Professor of the Principles and Practice of Medicine and Clinical Medicine, University of Louisville.

CASE 1. Patient twenty-three years of age. Three years before she had her first child; labor natural. One year ago she had a miscarriage. The last labor took place at full term, and was perfectly natural. Ten days later she got up, but did not feel well; she had rigors, and took to bed again. There was no pain or tenderness in the lower part of the abdomen; urine somewhat scanty; lochia abundant and offensive. The next day she complained of soreness in the muscles of mastication, and trismus and tetanus developed, which rapidly terminated in death.

CASE 2. This patient was twenty-four years of age. Her first labor, which was normal, occurred three years before; one year before she was again delivered, but with forceps. In the last labor there was transverse presentation; delivery was accomplished by version, and completed by the use of forceps under chloroform. On the fifth day she had chilliness; lochia offensive; difficulty in micturition. Five days later there was stiffness in the masseter muscles in both sides, with tenderness; trismus and tetanus ensued, terminating in death three days later.

*By Dr. Lushberg. Translated from *Hosp. Ydennie, Nord. Med. Arkiv.*, and read before the Louisville Clinical Society, December 3, 1889. See p. 38.

In the pelvic cellular tissue, behind the rectum and between it and the sacrum, was an abscess containing about 100 c. c. of pus. There was purulent infiltration of the connective tissue surrounding the abscess. Projecting venous thrombi were found over the placental site.

As evidence of direct infection of tetanus, it seemed probable that the disease had arisen from absorption of ptomaines developed in retained and decomposing portions of the placenta. Somewhat in favor of this view appears the fact that there was temporary arrest of the disease after the uterus had been thoroughly washed out.

BOTHRIOCEPHALUS LATUS AND PERNICIOUS ANEMIA.*

BY JOHN A. OUCHTERLONY, A. M., M. D.

Professor of the Principles and Practice of Medicine and Clinical Medicine, University of Louisville.

Dr. J. W. Runeberg has recorded nine cases of pernicious anemia at the Medical Clinic in Helsingfors. At the autopsy he found the bothriocephalus latus in the intestinal canal of most of these. He suggests that possibly this intestinal parasite is the cause of the anemia. Every case of this disease admitted to the Medical Clinic since 1883 has been investigated with the view of ascertaining the presence of bothriocephalus latus, and anthelmintics were prescribed wherever it had been found. The results of treatment of pernicious anemia have been much more favorable since this measure was adopted. Nineteen cases of pernicious anemia have been observed since 1883. Among these there was but one death, which occurred the day after the patient's admission to the hospital. The bothriocephalus latus was found in twelve out of these nineteen cases; there was ascaris lumbricoides in one. Pernicious anemia had arisen in one case during pregnancy, and recovery took place after delivery. In four cases no causes of the disease could be traced. In one case it was not mentioned whether the bothriocephalus was present or not.

*Trans. Med. Assoc. of Finland, and read before the Louisville Clinical Society, December 3, 1888. See p. 38.

It is thus found that sixty to seventy per cent of the cases had helminthiasis. An investigation was also undertaken by Dr. Runeberg to determine the presence of bothriocephalus latus in persons who were not suffering from pernicious anemia. It was found to occur in fourteen per cent of the cases. The author does not regard the bothriocephalus as having any specific effect, but rather that its pathogenic significance depends upon the disturbance of intestinal functions which it excites, and perhaps, principally, upon the irritation of the nervous system occasioned by the presence of this intestinal parasite.

PREGNANCY ASSOCIATED WITH GLYCOSURIA.*

BY J. G. BROOKS, M. D.

January last I was called to attend a lady who had for six months been under the treatment of a homeopath for suppression of menstruation.

I found the patient very much emaciated and extremely weak, a condition which she claimed was brought about by a constant nausea and vomiting, associated with an insatiable thirst. She had frequent urination, which varied much as to quantity as well as quality. Finding nothing at this visit particular upon which to base a diagnosis, I asked that a sample of her urine be sent to me for examination. I found it heavily laden with sugar, and concluded that I had a case of diabetes mellitus, and that it was upon this disease that all the above distressing symptoms depended.

I prescribed lithia. carb. gr. iij, soda, arseniate gr. $\frac{1}{6}$, in aerated water thrice daily.

There being no improvement, after ten days another examination of the urine was made, revealing sugar in great quantities. I now recommended diet, gradually withdrawing saccharine and starchy substances; but this was contrary to my judgment, as I felt confident that all symptoms would be aggravated save probably a falling off in

quantity of sugar in the urine, which, after a few days, proved true. But we must follow authority, lest bad results occur and we receive severe censure by both the laity and the good members of our profession who happen to be called later in the case. I need hardly state that she did grow rapidly worse under this diet treatment.

At this juncture I became very much concerned in the case, and made more frequent visits and closer inquiry, finding that all these symptoms came on simultaneously with a cessation of menstruation about seven months previously, and that all this time a tumor had been growing in her side.

On examination a tumor as large as six inches in diameter by ten inches in length occupied the right inguinal region, mounting up on a level with the umbilicus, and was freely movable in all directions save toward the left side. Digital examination *per vaginam* found the tumor well down below the pelvic rim, the os uteri being displaced to the extreme left side and above the lower border of the tumor.

After prolonged and careful examination I concluded that I had unquestionably a case of ectopic gestation, and that the diabetes was only a concomitant trouble. The next day, after a careful examination, in which the fetal heart-beat was clearly made out, I informed the lady that her tumor was a pregnancy, but not a normal one. This she positively denied, and asked me to bring counsel the next day, which I did.

I invited Drs. Elliott and Murrell, two of my colleagues, who, after they had examined the patient, agreed with me that it was a pregnancy and certainly extra-uterine.

By this time the condition of my patient was truly alarming, rendered so by loss of sleep and inanition. Prompt and decisive measures were now demanded, and the question was, what should they be?

Unquestionably the diabetes was rapidly sapping the life of our patient, and was only the proximate cause, the pregnancy being the remote cause, for prior to conception she had no diabetic symptoms.

We decided that the only means of relief

*Read before the Kentucky State Medical Society, May, 1889.

was to remove the child, and began making ready for a laparotomy. Pending this preparation, however, we explored the uterine cavity in order to settle beyond question as to whether this organ contained the child, and that, in the event it did, to rupture the membranes and bring on premature labor, notwithstanding the lack of authoritative clinical experience to back our judgment.

I failed to pass the sound over three inches, although I used considerable force. I was now more than ever convinced that we had an ectopic gestation, probably tubo-abdominal. A few hours after using the sound I was hurriedly summoned to her bedside. The sac had ruptured and labor was in progress. By this time the woman was eight months pregnant. The pains came on regularly, but there was no progress until after about six hours, when I could get my finger in the mouth of the womb, and when, as pains came on, I would pull the neck toward the median line.

Finally, finding my patient rapidly becoming exhausted, I gave chloroform and delivered with forceps, while my assistant, with one hand on the abdomen, literally forced the child from its lodgment in the right side. The placenta was removed by passing the hand into the womb and well over to the right inguinal region, withdrawing it in a line of the segment of a circle.

My patient rallied promptly from the operation and the anesthetic, and had no more vomiting or thirst.

The glycosuria rapidly disappeared, and, considering the extreme debility, she had a good getting up. The baby was very thin, weighed only two and one half pounds and was diabetic, but has since thrived and is now well.

The mother was put on a generous diet, especially fruits, wine, pastry, and sweetmeats, for the simple reason that she craved such food. Notwithstanding this course, the urine showed a rapid diminution of sugar as the examinations from time to time were made.

Unquestionably our diagnosis as to the form of gestation was incorrect, and, had

labor not come on as it did, we would have made a terrible blunder in opening the abdomen, which would have been done the next day. To us now it was clearly a case of one of those rare forms of pregnancy known as lateral dilation of the womb, and a condition seemingly upon which little is either said or written.

The termination of the case was indeed good, and a deal better than could have been expected. I am not ashamed to acknowledge the mistaken diagnosis, inasmuch as two very important lessons were learned, facts developed, I will say, at least so far as this case is concerned, viz:

1. That in grave cases of glycosuria associated with pregnancy premature labor should be induced.

2. That the so-called diet-treatment in such cases is pernicious and worse than useless, inasmuch as the diabetes is due to some unknown cause or condition brought about during gestation, and which can not be benefited by the withdrawal of saccharine and starchy substances.

PADUCAH, KY.

TWO CASES OF FATAL INJURY OF THE BRAIN.*

BY T. B. GREENLEY, M. D.

CASE 1. Fitz John Fisher, aged seventy-six, of active good health, was, on the night of September 4, 1889, accidentally kicked by a mule while in a stooping posture, the blow being received over the right eye, crushing in the superciliary arch of the frontal bone, and extending backward about two inches, near the coronal suture. The fractured and depressed portion of bone extended from near the median line about three inches to the right. This portion of bone was completely depressed into the brain substance, causing the escape of some brain material.

My friend, Dr. J. S. Lewis, of Tip Top, near whose residence the patient lived, was called immediately; but on account of not being able to get surgical assistance the pa-

* Read at the December meeting of the Hardin County Medical Society.

tient remained in the above described condition until the next night, over twenty-four hours.*

Dr. H. M. Pusey, of Louisville, and myself were called, and the depressed portion of bone was raised by the use of the trephine and elevator.

The patient had been unconscious from the time the accident occurred, and complete hemiplegia existed on the left side.

The operation had no favorable effect either in restoring consciousness or relieving the paralysis.

Taking into consideration the age of the patient, the character of the injury, and the time that elapsed before the operation, there was but little hope of his recovery. There was evidently great concussion as well as contusion of the brain, and I am well satisfied that if an operation had been performed immediately no good results would have followed. The patient died next day after the operation. No autopsy.

CASE 2. Marshall Lester, aged thirty, bridge-carpenter, on November 11, 1889, was thrown from a trestle thirty feet high. It seems, from the history of the accident, that he, with other hands, was on the trestle engaged in moving heavy timbers when some of the machinery gave way, which threw Lester to the ground. He was entangled in a rope and fell about thirty feet from the base of the trestle, which made the distance thrown about forty-five feet. The boss of the work witnessed the accident, and says he fell in a small sink hole where the ground was soft, and immediately after striking raised his head, or rather endeavored to assume the sitting posture. He also says that a large sill of timber twelve inches square slid off the trestle, following Lester, and struck him on the head just as he raised up. He is of the opinion that Lester was not badly hurt by the fall, but the blow from the timber rendered him unconscious and caused his death. By the assistance of a man on each side he walked

to his room, a distance of a quarter of a mile. On examination of the patient I found contusion and laceration of the scalp over the vertex, but by manipulation both with the finger and probe I could not detect any fracture or depression of bone. In fact there was not the slightest evidence of either depression of bone or compression of the brain. He was entirely unconscious, but had the active use of all the voluntary muscles. At times he was very restless, requiring several men to keep him in bed. On this account it was necessary to give him hypodermic injections of morphia occasionally in order to keep him quiet. He swallowed nothing, either fluid or solid, from the time he was hurt, although we occasionally applied water to his lips, hoping he might do so by instinct. We administered an enema in order to empty his bowels, which had the desired effect. On account of retention of urine the catheter was twice used, drawing off each time about twenty ounces, and illustrating the fact that functional activity of organs may exist independent of brain power.

In the management of the case I had the assistance of my young friend, Dr. Prewitt, of West Point, and also of Dr. Edward Pearce, of Louisville, the assistant of the railroad surgeon, Dr. W. O. Roberts of that city. Dr. P., on examination, agreed with us that there existed no depression of bone or compression of the brain, and consequently no indication for an operation. The patient lived about forty-four hours after the occurrence of the accident. Dr. Prewitt thought there was slight paralysis in some of the muscles of the right arm a few hours before death.

When first seen by the writer, shortly after he got to his rooms, reaction had not entirely taken place, but in a few hours his temperature rose to 2° abnormal heat. He had fever from this time on, amounting toward the last to 103°. On account of the great injury the brain had sustained, the pupils responded but little to the effects of light, varying only slightly from normal.

Autopsy eight hours after death. On removing the calvaria we found some effusion

*Dr. L. explained to me that one reason why assistance was not sooner obtained was the impression the patient would succumb before help could arrive, but as he lived through the night it was deemed best to give him the chance of an operation.

of blood between the dura mater and the cranium at the site of the scalp injury, which we thought escaped from the longitudinal sinus. Also found fracture running through the right parietal temporal and sphenoid bones. This fracture separated more widely as it descended toward the base, being perfectly closed at the top and the margins in apposition; through the parietal we could not insinuate the thickness of a pen-knife blade between the margins, but in the sphenoid it was not so completely closed, although at no point was there any displacement.

On looking at the surface of the cerebrum we found sulci of the convolutions pretty well filled with coagulated blood, which no doubt escaped from the pia mater. This membrane was greatly congested. There was some effusion of blood at the base of the brain.

On cutting through the brain substance we found but little evidence of inflammation, probably on account of the short time the patient lived after the accident. There was no effusion into the ventricles. Dr. Prewitt assisted in the autopsy.

In studying the history of a case of brain injury the question naturally arises: Can any thing beneficial to the patient be done in the way of a surgical operation?

In this case there were no symptoms presenting which tended in the least to indicate a lesion which could be benefited by an operation. Neither were there any conditions found on *post-mortem* examination which would have justified an operation.

WEST POINT, KY.

Societies.

LOUISVILLE CLINICAL SOCIETY.

Stated Meeting, December 3, 1889, William Cheatham, M. D., President, in the chair.

Two Translations, one from the Archives of Northern Medicine, and another from the Hospital Clinic, were read by Dr. J. A. Ouchterlony; No. 1, subject, *Bothriocephalus Latus* associated with Pernicious Anæmia. (See page 34.)

At the end of the article the essayist said: "*Bothriocephalus latus* is a peculiar form of

cestoid worm. It is most common in Northern Europe. It never sheds segments singly as do other tape-worms; the segments are broader than they are long. The opening of the genito-phoric canal is on one side. The worm may therefore be said to have a back and a belly."

DISCUSSION.

Dr. F. C. Leber said that the observations of the author have not been confirmed by European observers. If the worm is the cause of pernicious anemia it accounts for the good effects of turpentine in this disease.

Dr. T. P. Satterwhite said that he had never seen tape-worm of any kind associated with pernicious anemia. If the association of the two conditions can be proved it is a great indication for treatment.

Dr. Ouchterlony: The author does not say that all cases of pernicious anæmia are due to the worm, but that in nine out of ten of the cases observed the worm was found. Patients who received the anthelmintic treatment got well.

The second translation was entitled *Two Cases of Puerperal Tetanus*. (See page 34.)

DISCUSSION.

Dr. Douglas Morton said that the cases reported accentuated the value of antiseptics in labor cases. This measure is too much neglected here. If the vagina be disinfected no danger need be feared of puerperal fever. The speaker uses a solution of bichloride of mercury with tartaric acid. Vaginal irrigation is particularly agreeable to the woman. No odor follows when the above combination is used. He applies antiseptics to the womb only after turning or other exigency requiring the introduction of the hand into the organ. Sometimes when he is about to apply the forceps he precedes the measure with an injection. He believes every case of puerperal fever to be preventable. Since he has used antiseptics he has had no milk fever or other puerperal trouble. In one case, however, a month after delivery, the woman developed cellulitis.

Dr. P. Guntermann said he had delivered

many women, but had seen but one case of puerperal fever in his own practice. The woman was a primipara, and had been delivered by a midwife. He never uses antiseptics in midwifery. He simply washes his hands thoroughly. He believes that harm may be done by antiseptic injections.

Dr. Satterwhite saw one woman who showed stiffness of jaws after delivery. There had been in this case considerable bruising of the anterior wall of the vagina. He uses no antiseptic washes unless there is filth or fetor present.

Dr. Leber said that the author seemed to favor the theory that tetanus is due to a bacillus, from the prominence given the fact that the patient had an abscess situate between the uterus and rectum. Dr. Leber does not admit that the disease is of microbial origin, or at least he does not consider the point as proved.

Dr. Ouchterlony said: The two cases reported seem to prove that the puerperal state was responsible for the tetanus. We must admit either idiosyncrasy on part of the patient or some *materies morbi* due to the puerperal state, because in the cases reported the violent symptoms of tetanus were out of proportion to the lesions of the genital organs.

Dr. W. H. Wathen reported a case of septicemia following abortion at three months. The woman had been for a week under high fever. Her temperature, her doctor said, was 109° F. One doctor had removed a fetus, but had not tried to remove the placenta. Another doctor was called, and took away the placenta, which was decomposed and very fetid. The patient developed a well-marked septicemia. She is now getting simply supportive treatment, no local treatment being necessary. There is now no fetid discharge from the vagina.

A few years ago it was the practice to wash out the uterus and vagina after every labor. Doctors soon stopped washing out the uterus, and now few wash out the vagina. The speaker desires to put himself on record as saying that antiseptics are worthless in midwifery. The only thing needed

is absolute cleanliness before, during, and after labor.

There is no such thing as auto-genetic infection. There may be such a thing as endo-genetic infection, as in the case of a retained placenta. Obstetricians should keep the nails short and the hands absolutely clean. Very few people know what absolute cleanliness is. If cleanliness is insured on the part of the doctor and nurse and in all the surroundings of the woman, puerperal fever will not occur.

Dr. Ouchterlony said that cleanliness was beautiful and most desirable, but that in a large experience of his own, and in the reported experience of other physicians, he has noticed that septicæmia occurs most commonly among the wealthy and clean, while the poor and dirty women more rarely develop the disease. What is there in dirt to produce a specific disease? It must have a specific cause. Cleanliness is desirable because it rules out with other germs the specific germ of the disease in question. He believes that puerperal fever may sometimes be auto-genetic. Endo-genetic is merely a play upon the words.

Dr. Wathen explains: "A woman must have the poison put into her from without in all cases; by endo-genetic it is meant that the placenta serves as a nidus for the proliferation of germs introduced from without."

Dr. Ouchterlony said, further, that he believed a woman after labor to be just in the condition of a patient on whom a surgical operation had been done. By parity of reasoning, if antiseptics are needed in one they should be needed in the other.

Dr. Guntermann asked if Dr. Ouchterlony would use antiseptics because the uterus after labor is like a wound?

There is a difference between such a uterus and an abdominal wound. Nothing should go into the uterus after labor, not even air. It should be sealed. Poor women do not have the disease; but the higher classes do, and probably because of too much surgical interference.

Dr. W. O. Roberts said: We will find in all cases of puerperal fever that there has

been some laceration of the genital tract. Lusk says that, when the disease comes on in two or three days after labor, infection comes from without. Coming on later, infection is due to auto-inoculation.

Dr. Leber referred to three cases of retained placenta. In case one the patient was delivered by a midwife, and he was assured by her that the secundines had passed. Three weeks afterward the patient brought the placenta to him. It was decomposed and offensive. She had no fever. In case two a woman had miscarriage and retained the placenta two or three weeks. Case three: A woman, three weeks before she consulted the doctor, had aborted at three months. When the doctor saw her she was suffering with hemorrhage, for control of which a tampon was introduced. Next day he removed a placenta which had been in the womb three weeks. It was rotten and fetid. There was no fever in any of these cases.

Martin reports twenty cases of puerperal sepsis seen in consultation. He treats them with whisky, and cures most of his cases. In some cases he traces the disease to uterine lesion; in most to laceration of the fourchette and vagina. He seldom seeks for infection in the uterine cavity. He gives his patients all the alcohol they can drink, regarding it as the only efficient internal germicide.

Dr. Morton said he was surprised that Dr. Wathen should make Tait's pseudo-distinction between asepsis and antiseptis. Surgeons and obstetricians get cleanliness by the use of antiseptis. Before using the catheter or any obstetric instrument the speaker passes them through antiseptic washes. None except Tait abolishes antiseptics. Epidemics of puerperal fever are now rare. Once they were common. Antiseptics have made the change. The vaginal wash should be always used, because infection takes place through vaginal lesions.

Dr. Morton uses a 1-4,000 solution HgCl_2 made powerful by tartaric acid, which prevents the albuminate of mercury from forming. He gets asepsis by antiseptis. He

called attention to the fact that nothing but germs are, surgically speaking, dirt. Tait's success is the best illustration of the value of Listerism.

Dr. Wathen thinks it a mistake to say that the poor women have puerperal fever less frequently than the well-to-do. The seeming difference is to be found in the fact that cases among the latter are always brought to light, while those occurring among the former are frequently overlooked.

H. A. COTTELL, M. D.,

Secretary.

PITTSBURGH OBSTETRICAL SOCIETY.

Regular Meeting, November 7, 1889, R. Stansbury Sutton, M. D., President, in the chair.

Dr. Green read a paper on Face Presentation:

We understand by a face presentation that the chin is extended, that the occiput is reflected against the neck, and the face with the frontal portion of the skull occupies or has a great tendency to occupy the pelvic entrance. This condition does not occur frequently. Statistics show that among French obstetricians about one in two hundred and fifty presents a face. Dr. Churchill some years ago found that in British practice face presentations occurred once in two hundred and ninety-two cases. According to German statistics it occurs once in one hundred and thirty cases. If it could be proven that the difference in number really occurs, we might conclude that some difference in the anatomical formation of the pelvis exists, or that the fetal head among Germans is somewhat less, or may more frequently possess a long occiput.

Face presentations seem to merit only a cursory mention from many of our writers in obstetrics. We regard the subject of much more importance than seems to be attached to it by the writers. When we review the causes leading to face presentations, and difference of opinion with reference to the management of same, it will be noticed that some good authorities recommend one method of procedure, while equally as good advocate manipulations almost directly op-

posite. One directs version, another non-interference. Doctrines of this character tend largely to confuse the general practitioners—the men who really occupy the front rank among obstetricians—for it is they who wait on the legitimate mothers of families.

Edward L. Partridge asserts that there is no great disparity in the views of obstetricians upon the cause of face presentations. This may be true in a measure, yet it is equally true that scarcely any one writer coincides in a majority of particulars with any one else.

There seems little dispute about the classes or varieties of face presentation. Anterior, transverse, and the posterior varieties, we think, may with propriety include all shades of position as well here as in any other presentation, for a very small difference in the pelvic slopes will sometimes cause a vast modification of a vertex presentation. An ordinary obstetrician can, after a few hours of impatient waiting, discover some kind of a misfit between the outline of the fetal head and the beautifully described pelvic planes as set forth by Meigs and Bedford.

Obliquity of the uterus, according to most authors, is believed to be the cause of a very large majority of face presentations, from the fact that in nearly all cases, immediately after the diagnosis of face presentation is confirmed, obliquity of the womb is found to be present. Yet frequently obliquity of the uterus is well marked and the face does not present. We find recorded a number of face presentations observed during *post-mortem* examinations, which we think prove very little, the diagnosis not having been made out previous to the death of the mother. If the mother died before the fetus made its last effort to move, the absence of contractile power of the uterus would permit the child to assume almost any position and remain there indefinitely. Again, the fetus might gravitate, regardless of any and all surrounding circumstances, either with tendencies to bring about face presentation or any other head position. It seems reasonable to grant that, in case of dead fetus

with head presenting, the chin would drop away from the chest. We find all manner of presentations when the child is dead *in utero* previous to setting in of labor pains. It is in such cases that a large quantity of liquor amnii is usually present, and the membranes usually protrude unobstructed, containing an excess of fluid. The membranes being ruptured, a large quantity of fluid suddenly escapes, thus accounting for a portion of the excess in the number of face presentations when the fetus dies some time before the beginning of labor.

Another cause of face presentation: In dead children there is a lack of resistance on the part of the spinal column, when the uterus is conducting the early stage of labor and the fundus pressure can not be properly centered. In other words, the axis of the fetus can not be sustained; the mechanism of labor becomes unnatural, and the result doubtful. We might state that we believe any cause that may lead to the separation of the chin from the chest will lead to a face or brow presentation. This cause may exist in the fetus itself or in the anatomical formation of the mother's pelvis. The bony or soft parts may be at fault. Ahlfeld ascribes one case to enlargement of the thyroid gland. Increased size of the chest, some unusual looping of the umbilical cord, either too small or too great a quantity of amniotic fluid, may give rise to face presentations.

The causes may be physiological, pathological, anatomical, and, we might safely and truthfully state, traumatic or surgical, for not long since I heard a physician say that he believed he converted a crown to a face presentation. Hecker places great stress upon the shape of the child's head. Judging from the appearance of most of the babies that have faced me as an obstetrician, I would be perfectly willing to grant Hecker the full credit of his claim. Some of them were days getting into human shape. The diagnosis may be very easy for some, but with others the task is a troublesome one. My first case was properly made out after some time. I have al-

ways congratulated myself on the case, believing that it was some unusual form of face presentation that never occurred before, and am very certain I have not made a similar diagnosis since.

By the touch only can the diagnosis be made, and then the membranes must not be thick or largely distended. You must see that every thing connected with the case is favorable for an early diagnosis, for in the majority of cases the head remains high and the membranes low, and usually the frontal bone can most easily be touched, and it moves about with such a degree of facility that the obstetrician frequently finds it expedient to remain silent in the presence of the lady in labor and her near relatives. The outline of the face, according to most authorities and all the obstetricians, is the only reliable sign. These, however, are easily determined as soon as the head descends low enough.

The mechanism of labor in face presentations is similar in nearly all respects to that of head in any other position. When the chin presents in either of the lateral positions, descent and rotation, though somewhat delayed, always take place without interference. It is when rotation of the chin does not take place that the skill of the obstetrician is taxed. That labors have terminated successfully without the rotation of the chin we can not doubt, when such men as Partridge, Taylor, Tarriere, and others report them. But in nearly all cases the results are disastrous.

I have succeeded in rotating the head three times, I think, in all; once in converting a face to a vertex. After repeated efforts the patient was directed to take the knee-chest position. I had not read of placing the patient in this position with a view of converting a face to a vertex, nor can I speak of it in the hands of others, but I accomplished the end without much difficulty by placing my left hand under the abdomen of my patient and introducing the right hand well into the vagina, and by upward pressure I was, with very gentle pressure against the head with index and middle

finger of right hand, enabled to force back the chin and face. I then placed the woman on her left side, and in a few minutes the vertex presented. I then ruptured the membranes. The case terminated successfully in a short time.

Dr. Kearns: I never saw but one case of face presentation. It is rarely encountered. I have had cases which were face presentations, but not worthy of mention, inasmuch as they were premature fetuses and not attended with any difficulty whatever. The one case I had thirty years ago I will never forget. I had had but little experience prior to that time. The labor was protracted and very severe. Delivery was spontaneous. When I recognized the presentation it was far advanced. I can not recollect whether the child was dead or living; my memory is at fault. But I know the patient recovered, although it required a vast amount of patience on the part of the attendants, the case being protracted. I am sorry the doctor did not go more fully into the treatment of these cases. His classification of three forms is perhaps practically correct, posterior, right and left. As to the cause of this malpresentation, might it not be automatic? Might not the motions of the child produce it? Might not the fetus take a somersault and turn around and never be restored? With regard to treatment of cases, their delivery should be left to nature, I think.

Dr. Blume: I was much pleased with Dr. Green's paper. As he says, face presentation has often been the subject of discussion among obstetricians, and yet there is still a diversity of opinion as to its etiology and treatment. The doctor gave some causes which may produce this presentation. Winkel states that there are thirty-three theories on the etiology of face presentation. I do not intend to dwell on these; I wish to make a few remarks on the treatment. Since Boer, in 1791, first clearly described the mechanism of face presentation and showed that the chin always rotates to the front, no matter in what diameter the face presents at the pelvic inlet, an expectant treatment has more generally been recommended. To-day

it is the opinion of leading authorities that an expectant management should be considered as a fundamental rule in all those cases in which no contra-indication exists at the commencement of labor and no complication develops during the process of labor.

Such a contra-indication is a contracted pelvis. Its importance in the etiology of face presentation is well known, for we meet with it in about one third of all cases. Another important contra-indication is placenta previa. The third factor, which often may require interference, is feebleness of the uterine action, which may develop during the progress of labor; and finally, anomalies of the mechanism will also require assistance; among them cases of mento-posterior positions in which anterior rotation does not occur. Let us consider now a case with a contracted pelvis, where the true conjugate is somewhat less than four inches. It is the opinion of most authorities that the delivery should not be left to the powers of nature. The best method to deliver the child and protect the mother in such cases is version. If this fails, it may be possible to change the extension of the head and produce flexion. If this is a failure and the chin does not rotate to the front, it might be permissible for a skilled man to apply forceps and try to perform rotation, but very carefully. The blades may be applied as Scanzoni recommends, and may be taken off and reapplied if necessary. If this also should fail and the condition of the mother demand prompt delivery, craniotomy remains as the only safe procedure.

Now in cases of normal face presentation, where the head and the pelvis are normal, in such cases rotation usually will take place, and no interference is necessary as long as the mother and child are in good, healthy condition. If rotation should not occur, we have several ways to imitate and assist nature. In cases of mento-posterior presentation, for instance, rotation may not take place, because, as Penrose recently described, the chin can not descend far enough to meet with a sufficient resistance, and this is certainly true. He recommends a simple pro-

cedure, which deserves our attention. He applied in such a delayed case a blade of the forceps on the posterior cheek so that it found resistance, and the chin swept around instantly. Another method is the application of the forceps and trying to bring the chin to the front in the manner described by Scanzoni; but, as Penrose terms it, coax it rather than compel it to rotate. A better method than this latter attempt to produce rotation is to produce flexion and make out of a face presentation a normal vertex presentation. This can be done in three different ways. The old way, followed hundreds of years, is described by Dr. Green. The hand is introduced, the head is lifted upward, and the chin brought to the breast. If this fails, an attempt can be made to pull the occiput down, while the other hand presses firmly upon the head through the abdominal walls. A better but more difficult method is described and recommended by Schatz. He changes the unnatural lordotic attitude of face presentations into the normal kyphotic attitude of vertex presentations by external manipulations.

This method requires great dexterity, is permissible only during the first stage of labor, and often impossible when the abdominal walls are very thick, so that it is difficult to make out the shoulders and know you have a hold on them. Schatz first showed that face presentation is not only a faulty position of the head, but a faulty position of the whole body.

The last method was described three years ago by Thorn, formerly assistant of Olshausen. The hand is introduced inside the vagina, the head lifted upward, the chin, the forehead, and the occiput moved toward the breast. The external hand assists by pressing first the occiput downward, then the breast (as you see here on the board) from left to right, and finally the breech from right to left, so that a completely normal vertex presentation is produced.

This method is said not to be difficult; it can be performed even after the waters are drained off. If these methods fail, podalic version is indicated; and should this prove

impossible, the obstetrician having been called too late, nothing is left but craniotomy; it is the only safe way to deliver, and in such a case a conservative operation. It is not allowable under any condition to attempt to deliver with forceps when the chin is directed to the sacrum.

Dr. Duff: I would like to put myself on record. I don't believe in this conservative work in face presentation, as placed before us to-night. I think it the duty of the obstetrician to make his diagnosis early, and, having made it, rectify the difficulty by one of the methods suggested by Dr. Blume. You have not any right to sacrifice both mother and child in the faint hope that the head is going to pass through under these circumstances, where you have the opportunity of making a diagnosis early in the case. And, furthermore, I was sorry that Dr. Green did not go more extensively into consideration of the delivery of face presentation with chin posterior. The cases reported in our journals I do not believe. I believe it is an absolute impossibility for a child weighing $13\frac{1}{2}$ pounds to pass through a pelvis, even if that pelvis is $6\frac{1}{2}$ inches.

Dr. Blume: Dr. Green stated in his paper that external examination in face presentation fails, if I understood him aright. I must say that abdominal examination is often the only way to make out an exact presentation. The head is high up if you have a contracted pelvis, and it is sometimes impossible to diagnosticate exactly by the vagina those conditions which may be readily made out by abdominal palpation and auscultation.

Dr. Green: I agree with Dr. Kearns in his remarks to a great extent. I think myself, and I believe the general impression is, where the pelvis is not contracted, that all cases would terminate successfully without any surgical interference. It may have been my misfortune to meet with a few more face presentations than some others, yet I have not seen nearly so many as some physicians who attend a much less number of cases of confinement than I do. I have never seen a delivery where rotation of the

head did not occur, though I have no reason to disbelieve such men as have testified differently. I think certainly they know what they saw. I have only one remark to make in regard to what Dr. Blume has said as to deformed pelves. So far as I have looked up the matter, I think his report of causes is true. A deformity of the pelvis, while it may produce a face presentation, is no more likely to produce a face presentation than any other position of the head; and while it may produce a larger number of cases than some of the other causes assigned, I would state that so far as I have read the matter up the authors do not so state it. One further remark I wish to make in regard to the causes spoken of by Dr. Kearns, that is the motion of the child itself. Now that is given by some author; I can not tell you by whom. Dr. Blume speaks of thirty-three theories (Winckel). There are more than that number. As regards version, in the cases that I saw, and so far as I have looked the matter up, version after the rupture of the membrane by external means is not possible; it has failed entirely in the hands of the finest obstetricians. Besides, version of the child is one of the most hazardous operations to the mother. More women die after version than after any other surgical procedure, unless it be after craniotomy. They can be lacerated to a great extent by the use of instruments, or by manipulation in trying to place the head in position. During anesthesia they will endure instruments for hours, and they will endure the powerful manipulations of three or four men working for hours, and will recover; yet after version the mortality is greater.

Dr. Duff: Do you think that statistics stating the number of deaths from version during the past fifteen years would be reliable to-day? One of the great causes of mortality from version in the old statistics is the fact that we did not use antiseptics.

Dr. Green: I am glad you spoke of that. In looking this matter up I found one writer who stated that with all the present antiseptic facilities the mortality was greater.

Dr. Blume: I only want to defend version. The obstetrician more and more recog-

nizes the value of version in some cases, but these cases must be suitable ones; you must not have a half-dead woman to practice on.

Dr. Sutton: I want to take up the point mentioned by Dr. Duff. I say the statistics in obstetrics, beginning ten years ago and going back beyond, are worth nothing. Beginning ten years ago and coming this way, in the days of cleanliness, antiseptics, and chloroform, and the whole thing is changed. Version is as safe an operation ordinarily as putting your hand in the uterus and taking out the placenta.

Dr. Duff: In substantiation of that we have the statistics before us to-day that in certain hospitals where the death rate was as high as seventeen per cent ten years ago it is now less than one half of one per cent.

Dr. Sutton: Before closing the meeting I want to invite your attention to two specimens of large tumors:

This one is a fibroid; with the fundus of the uterus attached, the mass weighs nine pounds, and was removed two days ago at my private hospital by supra-vaginal hysterectomy. The second one is a multilocular ovarian cyst. The mass contains more cysts than I have ever before seen in one specimen. It was removed a few days ago. My results in ovariectomy now stand forty-one cases without a death, and forty-seven cases with one death.

Reviews and Bibliography.

Diseases of the Eye: A Practical Treatise for Students of Ophthalmology. By GEORGE A. BERRY, M. B., F. R. C. S., Edinburgh, Ophthalmic Surgeon Edinburgh Royal Infirmary, Senior Surgeon Edinburgh Eye Dispensary, Lecturer on Ophthalmology Royal College of Surgeons, Edinburgh. With colored illustrations from original drawings. Philadelphia: Lea Brothers & Co. 1889. Price, \$7.50.

The reviewer of this attractive work is impressed with the large number and interesting character of the colored drawings. In this it surpasses any text-book recently before the profession, and marks an era in the preparation of text-books for stu-

dents. The descriptions of the different diseases of the eye are mostly plain and practical, and show the author to be a clinical worker of much experience and judgment. The exclusion of a discussion of the pathological processes found in eye diseases will add to its popularity with students, but to the advanced worker in the field it will detract from its interest as a like omission detracts from the interest of several English text-books on the same subject.

A description of all the operations on the eye is reserved for a special chapter at the close of the work. While this avoids unnecessary repetition, to us it detracts much from its value as a text-book. It is annoying, in reading the history and course of a disease, to have the interest cut short by a reference to another part of the book for a description of the operator's procedure to be instituted. The work is divided into seventeen chapters, within which are discussed all the eye diseases that are apt to present themselves to us for treatment. From a reading of the principal chapters there are a few statements with which many will disagree with the author, such as the assertion that blepharitis is the most frequent cause of trichiasis. Much of his teaching, however, has our hearty recommendation; this is particularly true of the chapter on foreign bodies in the eye and on sympathetic ophthalmitis.

While the price of the book seems to be considerable and will deter the average student from purchase, the practitioner will find it cheap enough, since he can read its text with profit, and consult the illustrations as an aid to study where the opportunities for clinical work are few.

J. M. R.

A Treatise on Diseases of the Nose and Throat, in two volumes. By FRANCKE HUNTINGTON BOSWORTH, A. M., M. D., Professor of Diseases of the Throat in the Bellevue Hospital Medical College, etc. Volume 1, Diseases of the Nose and Naso-pharynx, with four colored plates and one hundred and eighty-two wood-cuts. New York: William Wood & Co. 1889.

Any one who doubts that the treatment of diseases of the throat and nose has progressed

within the past five years, will be convinced by a glance at the two books upon this subject by Dr. Bosworth. It has been only a few years since Dr. Bosworth brought out a book on Diseases of the Nose and Throat that attained considerable reputation for its author, and was a work of merit. Since that time, however, there has been a radical change in the study and treatment of throat and nose diseases, and when the author commenced a revised edition he found that the changes had become so great and the advances in diseases of throat and nose so rapid that an entirely new work was the only way to meet the demands of progress.

This new work is divided into two volumes. Volume first, the one before us, considers diseases of the nose and naso-pharynx. Since diseases of this part of the economy are daily attracting more attention, and the number of special workers in this field is increasing, a consideration of the subject such as this book furnishes is demanded of every practitioner. A few years ago general practitioners, and even specialists, were treating all forms of nasal and naso-pharyngeal diseases by means of astringents and antiseptics in the form of a spray to nose and naso-pharynx. Indeed, all were in the habit of ordering alkaline and detergent sprays with the idea of relieving hypertrophy of the turbinated structures, deviations of the septum, or adenoid vegetations. At the present time we know that such measures are of no curative effect whatever, and that for a successful result surgical or destructive agents, mechanical or chemical, must be used. While within the past few years great strides have been made in the successful management of diseases of the nose, at the same time there has accumulated an enormous number of instruments and apparatus. Indeed the young specialist has become almost bewildered on reading the journals and inspecting the instrument shops. Some specialists have even gone so far as to state that the failure of many in the treatment of diseases of the nose and naso-pharynx has been the want of proper instruments, those used by the writer of course being the only ones that were of the proper construction.

Again, we recall a cut appearing not long since in one of our leading journals in which

the author illustrates the tongue depressors required in his practice for a successful inspection of the pharynx and naso-pharynx, and to our amazement we count thirty-six, all hung on a rack ready for use. All this running after so many different instruments is unscientific, and we are glad to join with the author of this work in its condemnation.

Dr. Bosworth has said that for the successful treatment of any form of nasal or naso-pharyngeal disease the necessary instruments can be carried in the ordinary hand-bag—he might have said in his pockets.

A great deal of time could be spent and with much advantage in a systematic review of this book, since much of its teachings are new to the profession, and for the first time incorporated in a text book. Dr. Bosworth says with confidence that the teachings he promulgates are the proper methods. Indeed, one feels that he is often too dogmatic in his assertions, but such writing is the natural result of warm enthusiasm. The reader is more impressed with the methods of treatment recommended for the diseases of the nose and naso-pharynx than with the matter in any other portion of the book. His treatment for hypertrophic pleuritis, for instance, is simple; can be carried out by any physician, and yet is effective. He claims that chromic acid fused on a probe and applied to the distended turbinated bodies so as to pin down the engorged tissue, and not so as to act as an extensive escharotic, is all that is necessary. He uses the chromic acid in preference to galvano-cautery or any form of scissors or forceps.

Perhaps the most interesting and to a certain extent original portion of the book is the chapter that treats of hay-fever and asthma. The former he considers as a vaso-motor rhinitis, and the latter a vaso-motor bronchitis. The treatment he advocates is by means of surgery to correct defects of any kind in nose and throat, and by constitutional treatment of the nervous element found in all cases. This is an important subject and one in which the reviewer has been much interested. A few years ago we reviewed the little work of Sajous, and also made editorial comments on the subject, but the results gained from the treat-

ment of seventeen cases in the past three years, in each of which the treatment was most conscientiously carried out, have not justified the predictions therein made. In the treatment of the asthma results have been almost *nil*. Nevertheless, Dr. Bosworth's statistics show that out of thirty-four cases of hay-asthma nineteen were cured. This is encouraging, and will incite us to renewed efforts. The author is an advocate of the use of his saw to relieve deviations of the nasal septum. He is not enamored of the galvano-cautery, and thinks other means at our command are as effective and more to be depended upon. Section two of the book is devoted to a study of diseases of the naso-pharynx. He draws a very distinct line between diseases of the nose and of the naso-pharynx. This has not been done so clearly before in any book with which we are familiar. Adenoid vegetations in the vault of the pharynx have occupied the attention of specialists for the past few years. Since it is a disease almost always confined to children, and if left undisturbed produces mouth breathing and other disagreeable symptoms, and sometimes deafness, it should receive attention, and if possible the growths should be removed. The best method of accomplishing it is by cutting forceps. Dr. Bosworth prefers the curved snare, and under primary anesthesia from chloroform.

The author gives a most complete history of growths of the naso-pharynx, so-called nasopharyngeal fibroma, and the book ends with a description of the many operations advised for the removal of nasal and nasopharyngeal tumors by external incision. While it seems to us that this is superfluous in a work of this kind, we must admit its interest.

The book is a most valuable addition to the rapidly progressing specialty of nose and throat diseases, and will be read by all with interest and profit. It is well and attractively gotten together by the publisher, and is issued as one of a series on specialties in the practice of medicine.

J. M. R.

The Ophthalmic Review, vol. ix, 1890, edited by J. B. Lawford, M. D., London, Karl Grossman, Liverpool, Priestley Smith,

Birmingham, John B. Story, M. D., Dublin, and Edward Jackson, M. D., 215 South Seventeenth Street, Philadelphia, to whom all American communications concerning editorial matters, copies of papers, books for review, etc., should be addressed. Monthly subscription \$3 per annum, sample numbers twenty five cents. The Ophthalmic Review has hitherto devoted its space almost entirely to English and foreign contributions. Its success in this field has led the editors and publishers to increase its scope by including an index of American articles on Ophthalmological Subjects, Reviews of the most Important Papers, Original Articles by well-known men, and Reports of of the Meetings of the American Ophthalmological Society, and the Section on Ophthalmology of the American Medical Association. P. Blakiston, Son & Co., Philadelphia.

The Physician's Hand-book for 1890, new edition, containing all the new remedial agents. By A. D. Elmer, M. D. This popular *Standard Hand-book*, which has been issued for over thirty years by the W. A. Townsend Publishing Co., has been transferred to G. P. Putnam's Sons, of New York. The edition for 1890 has been thoroughly revised and many valuable improvements made, which will make it a most useful companion to practical physicians.

The hand-book possesses features exclusively its own, combining the conveniences of a Diary with those of a Manual. This edition contains all the recent discoveries in Materia Medica and Therapeutics, together with the new remedies.

It also contains three hundred blank pages arranged in diary form for thirty-four or sixty-eight patients, and so ruled and divided as to admit of a complete and compact record of professional practice. Bound in English morocco, red edges, pocket-book form, with tucks and pencil. Price, \$1.50 with printed matter, and \$1.25 printed matter omitted. Postage free. G. P. Putnam's Sons, 27 and 29 West Twenty-third Street, New York.

DR. DAVID PRINCE, one of the most able and original surgeons of the West, died of pneumonia at his home in Jacksonville, Ill., on December 19, 1889. He had reached the ripe age of seventy-three years. The readers of the American Practitioner and News will remember Dr. Prince as one of our most scholarly contributors.

Correspondence.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

In a recent clinical lecture at the Saint Anne Asylum Professor Ball treated of lunatics at liberty. This subject was chosen apropos of the following remarkable case: A man, very respectable and intelligent, Chevalier of the Legion of Honor and of the Order of Mexico, married a woman without knowing any thing of her antecedents, whose father had for a long time been insane. This woman was soon seized with the delirium of persecution, and believed herself to be the object of the animosity of all her neighbors. The husband at first endeavored to show her her error, but finished by finding himself drawn into the same delirium. This, the learned professor observed, was one of those curious cases of dual insanity which he termed "*folie à deux*," which are far from being rare. The husband, more strong-minded, an old soldier, one day went into the street with a revolver in his hand, and suspecting that his honor was impeached, challenged in vain the other lodgers, whom he thought wished to seek a quarrel with him. Of course no one responded to his challenge. On another occasion he heard voices provoking him to a duel, and, feeling certain that he had really spoken with some one, he went at 4 o'clock in the morning to the place appointed on the fortifications, but he found no adversary. Feeling disappointed and vexed, he went to the Commissary of Police of his district, who advised him to go to the Procuror of the Republic, whence he was conducted. This judicial officer was none other than a physician, by whom he was sent to the Saint Anne Asylum, where he has been for the last four years. He is now considered to be quite cured. He relates his history in a most lucid and intelligent manner; and he would be immediately set at liberty were it not that his wife, who is living in his house, is still insane, and this insanity, being hereditary, might be likely to affect her husband again. The unfortunate man, al-

though cured, feels that he would have some difficulty to resist the baneful influence of his wife, but the Commissary of Police of the district in which his wife resides declared that she was not insane and that the administration had no power over her.

At the recent Congress of Surgery, Dr. Reclus extolled the properties of cocaine, the effects of which, he said, were too little appreciated by some and calumniated by others. Dr. J. A. Fort, writing on this subject in his *Revue Chirurgicale*, just brought out, agrees with this surgeon as to the insufficiency of lotions of cocaine to produce anesthesia. Exception, however, may be made for the conjunctiva, which one drop alone of a solution of one twentieth strength renders perfectly insensible, as also for the mucous membrane of the urethra. It was thought that in the cases where the cocaine had produced accidents the dose at which it was employed was much too strong. It is not necessary to exceed 20 centigrams, and this is amply sufficient to procure anesthesia to a certain extent. But Dr. Fort does not think it necessary to attain the dose of 20 centigrams, and in several recent operations on the skin of the penis, on the prepuce, and on the urethra he produced complete anesthesia with 10 centigrams of cocaine. In a case of incision of the frenum of the penis he injected only one centigram of the medicament, and obtained complete insensibility. In a case of circumcision Dr. Fort injected 12 centigrams of cocaine, and four minutes after the injection nausea, accompanied with dryness of the throat and a little giddiness, set in. The operation was hastened through in order to prevent further absorption, and this slight accident had no sequence. It is known that the mucous membrane of the bladder does not absorb when in a normal condition. It is generally supposed that the mucous membrane of the urethra does not possess the same property as the other mucous membranes in general, but the following case proves the contrary: Dr. Fort had to perform an operation on the urethra of a man whom he directed to inject into the canal a

solution of the hydrochlorate of cocaine of one tenth strength, ten minutes before his arrival. He ascertained that twenty-five centigrams of the cocaine had been introduced. Six minutes after the injection, which was retained in the canal by pressure on the extremity of the penis, the patient presented all the symptoms of poisoning, which, however, disappeared after two hours' appropriate treatment.

At a recent meeting of the Medical Society of Hospitals Dr. Dreyfous recalled that the conditions necessary for an antiseptic of the urinary organs are that it should be little soluble, that it should have no toxic action, that it should be neither antithermic nor a general nor an intestinal antiseptic, that all its action should be reserved for the urinary organs. Salol, which is separated in the intestine into carbolic acid and salicylic acid, which pass into the urine, the first as a sulpho-carbolate, the second in its natural state—salol responds to these conditions. Dr. Dreyfous has treated seven cases of gonorrhea with salol in doses varying from five to eight grams, either alone or associated with balsamics. In all the cases the gonorrheal discharge was rapidly modified. In a case dating four days the cure was obtained in three days. He thinks there is every advantage to associate cubebs and copaiba with salol. He recommends the use of salol for operations on the urinary organs. It renders urine aseptic, which thus becomes innocuous when in contact with raw surfaces.

At the Academy of Sciences Dr. Tripier, of Lyons, had a paper read for him on a Surgical Method of Restoring the Eyelids. When the lower eyelid is concerned he dissects a tongue of skin from the suborbital region, taking care neither to dissect muscles nor nerves. The strip of skin thus free he places on the raw surface of the lower eyelid, which becomes grafted on it and constitutes an eyelid. To form the upper eyelid, a strip of skin is dissected in the supra-orbital region and fixed in the space which the eyelid should occupy. The photographs shown at the meeting indicated that

the patients thus operated on could open and shut their eyes. The disfigurement resulting from absence of eyelids is considerably modified.

In his report on epidemics, recently read before the Academy of Medicine, Dr. Olivier recommended mercuric chloride in the form of Van Swieten's solution for treating cholera.

PARIS, December, 1889.

Abstracts and Selections.

ON TWO RAPIDLY FATAL CASES OF DIPHTHERITIC PARALYSIS.—C. R., a gardener, aged twenty-five, was attacked on May 22d with ordinary pharyngeal diphtheria. There was nothing noteworthy in the attack except that the membrane was somewhat unduly persistent, the tonsils not clearing till the thirteenth day. His temperature reached the normal on the ninth day. There was no albuminuria and but slight glandular implication, nor was the illness followed by undue prostration. After a few days in the country he resumed his employment.

On July 1st, having finished his day's work, he again presented himself, saying that he felt very unwell. The man was so obviously ill that he was at once readmitted to the hospital. According to his account he had never felt really strong or well since his illness. About six days previously he began to have difficulty in speaking plainly, and afterward noticed that there was increasing difficulty in swallowing, the food often getting into the air-passages or returning through the nose, with frequent fits of choking. Had felt numbness in the fingers and feet for the last two days, but was able to do his work, though greatly fatigued thereby. When admitted, at 6:30 p. m., it was extremely difficult to understand what he said, phonation being very imperfect and the voice hoarse and nasal. There was great difficulty in swallowing either liquids or solids, frequent shallow hoarse cough, with inability to clear his fauces. The vocal cords were seen to be lying in the cadaveric position, and moved but slightly toward the mid-line. The larynx was anesthetic. Muscular power in arms weak, and tingling in feet. Patellar reflex exaggerated. Temperature 103.6°; respiration 40, shallow and jerky. Pulse 120. 2d: Passed a restless night. Complete inability to swallow; fed with soft stomach-tube. Voice inaudible.

Respiration 48, shallow and noisy. Diaphragm acting very feebly, if at all. Face dusky, sweating. Pulse 120, regular. Patellar reflex absent. Analgesia in legs, but can feel cutaneous pressure. During the afternoon the sweating continued; cyanosis became more marked. Pupils dilated. Respiration over 50, very shallow. Died quietly at 5:45 P. M. Twenty-four hours before his death the man was at work.

The second case occurred in a child aged five years, C. D., admitted on August 28th, with faucial diphtheria. Complained of sore throat, and vomited the day before. The case was a very severe one, characterized by abundance of exudation on tonsils and pharynx, much glandular swelling, rhinorrhea, and great prostration. On September 6th he had a severe syncopic attack, but rallied under stimulants. The membrane in this case too was very persistent, the throat not becoming free until the sixteenth day. The temperature reached the normal on the eighth day, and afterward was usually sub-normal. There was slight albuminuria from the first, which remained as a nearly constant trace throughout the illness. With the exception of some paralysis and loss of reflex in the palate and a certain amount of glandular swelling, the ensuing convalescence presented nothing unusual. On the 17th it was noted that the voice had quite lost its nasal tone. On the 20th the patellar reflex disappeared; the palate was anesthetic. No motor paralysis observed. On October 2d food was noticed to return through the nose. Palate immovable; no reflex. Bilateral ophthalmoplegia externa especially affecting the right internal rectus, which was quite paralyzed. Accommodation sluggish; irides react to light. Walk very "groggy;" patellar reflex absent. 14th: Double ptosis, most marked on left side; albuminuria slight. Child sitting up in bed playing with its toys. 15th: Inability to swallow; voice indistinct; dyspnea. Ocular paralysis complete. The legs and back appear very weak; can not support himself in a sitting posture. No resistance to passing the stomach-tube. Diaphragm not acting; thoracic respiration feeble (40 to the minute); inability to cough; restless and sweating; pulse 100, regular. Toward evening cyanosis became marked. Temperature 99.8°; respiration over 50, shallow and noisy. Died at 11 P. M., the pulse being perceptible for some time after respiration had ceased.

It is remarkable that in both instances, although paretic symptoms were present for about a week before death, yet it was only

within the last thirty-six hours that the cases took on a serious aspect and proved fatal by respiratory paralysis. The symptoms pointing to an affection of the vital functions occurred during the late stage of convalescence, viz., in the fifth and sixth week, a time when it is more usual to find a form of paralysis mainly characterized by an affection of the spinal nerves supplying the limbs. In both cases the faucial affection was severe, the membrane being very persistent. This is in accord with my own experience, viz., that it is the severe cases which are most frequently followed by subsequent paralysis, the mild ones usually escaping altogether. I believe that in a good many cases of paralysis which are diagnosed to be of diphtheritic origin the original attack of diphtheria is accepted on insufficient evidence; the statement elicited from the patient or his friends that he has had a sore throat some weeks previously (in one case I remember it was three months) being taken as sufficiently conclusive evidence that it was an attack of diphtheria, whereas the case might with equal propriety be referred to the operation of some other cause of which we are ignorant. Cases of peripheral neuritis of alcoholic origin may be the type of a wider series, and they certainly bear a close clinical analogy to diphtheritic paralysis.

I have been repeatedly struck by the fact that those cases of diphtheria which during the acute stage present a large amount of mucoid secretion at the back of the pharynx, accompanied with rhinorrhea, are of the most grave kind, and rapidly reach a fatal termination. The increased secretion, however, is probably only apparent, the accumulation being due to retention, and is a sign of the oncoming paralysis of deglutition, which quickly becomes associated with laryngeal affection and cardiac or respiratory failure. It is this paralysis of early onset, affecting as it does the vital functions, which is so frequently fatal, and tends, I think, to support the view adopted by Hilton Fagge, on the theory of a "neuritis migrans," that there is direct association between the local process and an affection of the nuclei of origin or of the nerve trunks emanating from the medulla and floor of the fourth ventricle, from some of the peripheral fibers of which the diseased surface derives its innervation.—*London Lancet*.

THE TREATMENT OF TYPHOID FEVER BY ANTISEPTICS.—A recent communication to the *Bulletin Général de Thérapeutique*, by

Professor Pétresco, of Bucharest, gives the results of the treatment of typhoid fever in the Roumanian army by various antiseptics, and especially by phenic acid, naphthol, and sulphide of carbon.

In 1883, on the occasion of an epidemic of typhoid fever which broke out in the garrison of Bucharest, Pétresco instituted the treatment by phenic acid. The results obtained were not satisfactory; out of 116 patients 28 died.

In 1884 he undertook a series of clinical and experimental researches on parasitism, in typhoid fever, and made extensive trials with salicylic acid, turpentine, benzoic acid, and kairin. The results were still unsatisfactory, the mortality being from twenty-five to thirty-eight per cent.

In 1885, the same clinical investigator undertook to verify the antiseptic action of calomel, bichloride of mercury, sulphide of quinine, and boric acid. The results were not favorable.

In 1886 he treated his typhoid patients with the saturated solution of sulphide of carbon. The results were better, the mortality being but ten per cent.

In 1887, he "verified the antizymotic and antithermic action of antipyrin in doses amounting to two drams a day." The mortality was still relatively high.

Lastly, in June, 1888, the indefatigable professor of Bucharest, "inspired by the labors of Professor Bouchard," began treating his typhoid patients with naphthol in doses of fifteen grains three times a day. In some cases a fourth dose of one gram was given in the night-time. The results have been more favorable than those obtained by any of the other remedies. Out of forty-one typhoid patients who entered the military hospital in 1888, only twenty-five were treated in a systematic manner by naphthol; of these there was but one death. Hence Pétresco concludes that sulphide of carbon and naphthol have proved themselves more worthy of confidence than the other medicaments used in typhoid were, and he affirms that by these two medicines employed separately, or associated with cold-water treatment, not only are the morbidity and mortality of typhoid fever reduced, but the march of the disease is also favorably modified. The evolution of the disease takes place, he thinks, without presenting the grave ataxo-dynamic phenomena of auto-infection, such as show themselves in the sequelæ of treatment by other remedies.

The number of cases is too small, and the information as to disease-type in the differ-

ent years is too scanty to permit of any very definite conclusions from Pétresco's results.

Dr. George L. Peabody, in a communication to the Practitioner's Society of New York (Medical News, December 14th), gives the results of treatment of fifty typhoid patients in the New York and Bellevue Hospitals during the year 1888, when the type of fever was less severe than usual, with beta-naphthol and resorcin as antiseptics, and the cold pack as an antipyretic:

"When patients entered the hospital sufficiently early in the disease, that is to say, within the first ten days, the routine method was to administer a calomel purge of ten grains, and then immediately to follow this drug by a dose of one of the antiseptics, which was repeated at varying intervals, day and night, as a rule, until the temperature became normal and remained so.

"When resorcin was used, it was given in the dose of five grains every four hours; when beta-naphthol was used, its dose was two grains, given every two, three, or four hours, depending upon its effects. These drugs were administered in pill form, and each pill was carefully coated with keratine, to insure it against changes to which it might have been subjected in the stomach. Thirty-three well-marked cases of this disease came under my care in the New York Hospital last year, and of these twenty-seven were treated antiseptically in one of the ways indicated.

"But little use was made of any of the newer antipyretic drugs, though in some cases occasional doses of phenacetine were administered. This formed no part of the plan of treatment, and was ordinarily given only a few times when the temperature remained persistently high.

"The effects of the antiseptics upon Ehrlich's diazo-reaction were interesting. This reaction, even though it might have been ever so plainly present when the patients began treatment (and it was so almost invariably), usually disappeared after the first few doses, and remained constantly absent while the drugs were given. In several cases, for experimental purposes, the drugs were stopped, and the reaction promptly returned, to disappear again when the administration of the drugs was resumed. Of unpleasant consequences of these drugs, I have to record the occurrence of blood, albumen, and casts in the urine in a few patients who took beta-naphthol. These symptoms were always looked

upon as positive indications to discontinue the drug, and they disappeared promptly when it was stopped. Resorcin produced absolutely no unpleasant effects."

Peabody concludes that, on the whole, the method of treatment by the cold pack has been more gratifying to him than that by the internal use of antiseptics, but emphasizes the importance of using it systematically and so frequently as to keep the temperature always below 102°. At the same time he acknowledges the impediments in this country which the comparatively late periods at which typhoid patients enter the hospitals and the disposition of the hospital services thrown in the way of the proper and systematic treatment of typhoid fever.

Although such therapeutic studies are worthy of attention, we see nothing in them to lead us to alter our opinion that attempts to control the course of typhoid fever by antiseptics of the bowel will be ultimately abandoned as irrational and unavailing.—*Boston Medical and Surgical Journal*.

NEUTRALIZATION OF THE BACILLUS TETANI. In June last Professor Sormani, of Milan, announced to the Lombard Institute of Sciences the results of his experiments on the neutralization of the tetanigenous microbe—results which seemed to justify his conclusion that iodoform, iodol, and corrosive sublimate are absolutely destructive of the bacillus in question. To these disinfecting agents he has, as the result of further experiments, added three more—namely, chloroform, chloral hydrate, and camphorated chloral; the latter being, he alleges, in a marked degree efficacious, while camphor and camphorated alcohol he found inert. On a general review of the whole, however, he gives the preference to iodoform. Seven rabbits were inoculated with materials charged with the tetanigenous virus. From six of these, after an interval of twelve hours, the foreign body was removed during the period of incubation; from the seventh the substance was removed only when the first symptoms of local tetanic convulsions had declared themselves. In all these animals the wound was scraped and thereafter freely medicated with iodoform. The seventh rabbit died of tetanus. Of the first six, five were saved. From this Dr. Sormani concludes that medication of wounds with iodoform ought to be practiced before the setting in of the first tetanic symptoms. Nevertheless, even during declared tetanus, the application of iodoform to the wound is capable of disinfecting it and of removing from it all trace of virulence. Wounds and

sores treated with iodoform, especially wounds or sores contaminated with earth, yield results highly welcome to the surgeon—such medication preventing the access of that fatal tetanic symptom which, having once declared itself, leaves but little chance for skilled interference. Dr. Sormani gave confirmatory proof of his thesis by cases of tetanus in hospital, where iodoform opportunely applied saved the patients, and where, from its use having been unfortunately suspended, two lives were sacrificed. *Lancet*.

THE LESIONS OF INFANTILE SUMMER DIARRHEA.—Dr. L. Emmet Holt, in a paper entitled "The Prevention of Summer Diarrhea among Infants, viewed in the Light of the Lesions," expresses the opinion that the dyspeptic intestinal catarrhs of infancy produce lesions of considerable importance, not so much in their immediate effects as in their relation to the severer forms of the disease, particularly entero-colitis. His attention was first drawn to this subject by two autopsies upon children ten months old. One died of acute pneumonia, without intestinal complications. Throughout the large intestine in this case the solitary follicles were increased in size and number, some being eroded at their summits as if about to ulcerate. The child had been nursed entirely and its health seemed good; but during its first five months of life the bowels were never normal, the passages being green and nearly always containing mucus; in number they were never more than three or four daily. There was gradual improvement in regard to the discharges without treatment, and during the last five months of life the bowels were apparently normal. The second child fell from a window and died within an hour. In this child the colon was found in a condition similar to the other case. There had never been any acute diarrhea, but for three weeks before death the stools had been green and contained mucus. The microscope showed but slight catarrhal changes, the important feature being the great enlargement of the solitary follicles. Examinations of other cases in which a dyspeptic intestinal catarrh had been allowed to run on without treatment showed similar changes in the intestinal wall. If a child's intestine is examined some months after an attack of entero-colitis, similar anatomical changes will be found. In cases of acute entero-colitis of ten or twelve days' duration the solitary follicles are enlarged, and where they have broken down small circular ulcers will be found. Since the condition in dyspeptic catarrh is similar, it may be regarded as identical with the first stage of the ulcerative

process. The swelling in both cases is probably due to the same cause, the absorption of ptomaines produced by the intestinal decomposition. The majority of all severe and fatal forms of enterocolitis in summer are preceded often for weeks by a dyspeptic catarrh; this often passes unobserved, the mothers attach so little importance to it, especially, if the infants are teething.

The author reports fifty-seven autopsies that have been performed upon cases of diarrheal diseases. In almost every case the solitary follicles were enlarged; in nineteen follicular ulceration existed. Follicular changes are slow in disappearing; this explains the long continuance of what are apparently very mild cases of intestinal catarrh, and the frequent relapses after the more acute attacks. The treatment of follicular ulceration of the intestines is very unsatisfactory; the proper treatment is preventive. Every diarrhea should receive early and intelligent treatment, best obtained by proper digestion, which means proper feeding and especial care not to overfeed.—*Dr. T. M. Rotch, Boston Medical and Surgical Journal.*

TESTS FOR MELANURIA.—R. von Jaksch (*Zeitsch. für Phys. Chem.*) has been endeavoring to obtain more satisfactory tests for the condition known as melanuria. As ordinarily described, this is characterized by the passage of urine which becomes black or very dark on the surface as soon as it is exposed to air. On standing, a black pigment is deposited, which is termed melanine, and is distinguished from other coloring matters in urine by its insolubility in water, alcohol, ether, and acids, with the exception of strong nitric acid, which decomposes it. R. von Jaksch finds that when perchloride of iron is added to thick and highly colored urine a precipitate is formed. On the addition of a very dilute solution of perchloride of iron only a light blackish-brown cloud results. A tolerably concentrated solution gives a grayish-white precipitate. After filtration, fresh addition of perchloride of iron gives rise to a dark color and a light precipitate. With an excess of perchloride of iron the gray precipitate is dissolved and the black precipitate remains, and is only dissolved with a very large quantity of the reagent. The coloring matter thus precipitated is a mixture of different substances. It is soluble in hot formic acid and in lactic acid. It is insoluble in acetic acid, chloroform, glycerine, etc. It contains nitrogen, iron, and sulphur. With ferrocyanide of sodium and carbonate of potassium the urine gives a rose-red color if the solution is dilute, and a dark red color with concen-

trated solutions. Mineral and organic acids change this to a deep blue, and after a time a precipitate forms. This precipitate, separated by filtration, dissolved in carbonate of soda and treated with hydrochloric acid and perchloride of iron, gives a precipitate of prussian blue. This last reaction is not peculiar to melanine, and is only a confirmatory test after the presence of melanine has been proven by perchloride of iron. Melanuria, that is to say, the presence of melanine in urine, is an important element in the diagnosis of melanotic cancer. *Lancet.*

WAKEFULNESS IN NEURASTHENIA.—The use of drugs, with the exception of sulphonal, perhaps, did not find much favor with the members. Some of them had found that their patients of this class slept when they were at the seaside, while others recommended the Colorado atmosphere. Some patients had been found to be able to sleep at sea, but not on land. The weight of evidence seemed to favor the resort to mountain air for patients who were anemic, with a presumption in favor of sea air for those who were plethoric. Dr. Solly, of Colorado Springs, has found that a large proportion of anemic neurasthenics find sleep on the mountain heights, but this can not be said of the entire class. It is not improbable that other conditions besides those of climate enter into the account where the patient travels from our eastern cities to the Rocky Mountains in pursuit of sleep. The jaded matron leaves the worries of the household, and the business man, broken down by the rush of daily cares, finds many things changed besides the atmosphere among the far western altitudes. Still, as a rule, the climate gets all the praise when an improvement takes place. Business men from the East report a larger percentage of recoveries than the matrons, however, probably because fewer of their anxieties can follow them. Improvement in the assimilation of food, it should not be forgotten, goes a great way toward sleep-production in those who are affected with derangement of the nervous system, and this is one of the frequent accompaniments of any change of scene and environment. Not that there is always any marked increase of appetite or in the amount of food taken, but there is an appropriation of the food by the nervous centers to their consequent strengthening. It is often a prominent feature in neurasthenia that the food may be taken in and digested fairly well, but stops short somewhere in its distribution

to the tissues and is largely wasted. Ordinarily, when this waste ceases there is a corresponding abatement of wakefulness and other neurotic symptoms.—*New York Medical Journal*.

EXTRA-PERITONEAL FAT SIMULATING HERNIA.—The following condition was met with in the anatomy rooms a few days ago, and appears of interest surgically. A well-developed male body was noticed to have a small swelling above Poupart's ligament on the right side, which could not be diminished by pressure, and was apparently in the inguinal canal. On removing skin and fascia the bulging was more pronounced, and was now seen to be entirely in the inguinal canal, on opening which a rounded portion of fatty tissue was found lying on the spermatic cord, which was flattened to accommodate it. The mass was polypoid in shape, about two inches long and an inch and a half across its free extremity; the neck could only be seen on drawing it down from the abdomen; the fat was very soft, and on its posterior aspect a thin fibrous cord was formed, but no covering as of peritoneum existed. On examining the interior of the abdomen, a short omentum was found, and perfectly free. The peritoneum over the inguinal region was without pouching, therefore the fat was certainly not omental. In this region and on each side of the pelvis there were well-marked eminences, due to the enlargement of portions of the extra-peritoneal fat, and on making a section into the inguinal canal the mass of fat discovered here was continuous with and part of one of these enlargements. One can imagine how such a condition so marked as to give rise to a distinct swelling externally would undoubtedly have been "cut down upon" if any symptoms of intestinal obstruction had manifested themselves. In fact, the appearance was one of well-marked bubonoecele.—*W. T. Thomas, London Lancet*.

FIBRINOUS MEMBRANES WITHIN THE SPINAL CANAL.—Dr. Joseph Wigglesworth reports three cases of general paralysis in which he found, *post-mortem*, fibrinous membranes in connection with the spinal cord. In the first case the membrane was from one to two lines in thickness, and was found lying upon the external surface of the dura mater on its posterior aspect. It extended from the third to the seventh dorsal vertebra, and was attached both to the dura mater and to the walls of the spinal canal.

In the second case the membrane was similar

to the foregoing one. In the third case it extended from the lower cervical to the lower dorsal region, and involved the roots of some of the spinal nerves. It was everywhere coherent, and could be detached as a separate membrane. The three membranes were all *external* to the dura mater, in which respect they differ from the similar formations which are frequently discovered in the cranium, especially in *post-mortems* of the insane. Dr. Wigglesworth believes that the membranes described are the result of a hemorrhagic effusion within the spinal canal; that an inflammatory process is not concerned in their formation, and that they would be discovered much more frequently if sought. In the third case he suspected the presence of the membrane before the death of the patient, on account of the symptoms of irritation of the spinal nerves which existed, to wit, retraction of the head and rigidity of the extremities.—*British Medical Journal*.

CARBOLIC ACID IN TYPHOID FEVER.—The following case may be of interest as evidence of the abortive power which has been ascribed to carbolic acid in typhoid fever. The patient, a young man aged twenty-one, lived in a house at which I had, during the early part of the present year, attended two consecutive cases of this disease. On being summoned I elicited a history of well-marked premonitory symptoms, including pains in the back and limbs, severe headache, lassitude, anorexia, vomiting, and rigors. On physical examination I found tenderness on pressure in the right iliac region, accompanied by gurgling and tympanites. Temperature 103.4°, pulse 95, tongue furred, patient apathetic and drowsy. I ordered the usual strict dieting, and prescribed a mixture containing minim doses of carbolic acid and two grains of quinine to be taken every four hours. On the second day of attendance I found the patient much better. Temperature subnormal; bowels, which had been somewhat constipated, relieved by a single foul liquid motion; no aperient had been given. For the following three days the temperature continued to be subnormal, although I had discontinued the quinine; it then gradually approached the normal, and never again rose above it. Beyond the appearance, on the fourth day of attendance, of a few somewhat equivocal rose-colored spots on the back and abdomen, the characteristic eruption was not developed. By the seventh day all symptoms had disappeared, with the exception of occasional pain and a little tenderness on pressure in the iliac re-

gion. Taking together the well-marked premonitory symptoms, the condition of the patient when first seen, and the fact of two cases having previously occurred in the same house, I think I was justified in diagnosing typhoid fever, and in attributing its arrest and cure to the administration of carbolic acid.—*E. A. Thompson, London Lancet.*

METHYL CHLORIDE AS A LOCAL ANESTHETIC. Dr. Ernst Feibes, in a recent number of the *Berliner Klinische Wochenschrift*, draws attention to the extensive and successful use in the Paris hospitals of methyl chloride as a local anesthetic. Methyl chloride ($\text{CH}_3 \text{CL}$) is a colorless, easily liquefied gas, with an odor resembling that of ether and chloroform. The readiness with which the gas liquefies adapts it for convenient use, as it can be stored in a siphon or in a bottle of any size especially constructed to conduct heat badly. It may be applied to any surface directly from the siphon, or as a spray, but this method is objectionable, owing to the anesthetized area not being in most cases sufficiently circumscribed. Bailly uses the following method, which he calls "stypage": Tampons composed of cotton wool, surrounded by a layer of flock-silk and then covered with thin silk, are saturated with methyl chloride and applied to the part by means of wooden or vulcanite holders. After contact for some seconds the part gets pale and anemic, and diminishes in sensitiveness. If the tampon be then removed there is marked reaction, shown by congestion and slight itching; but if the application be continued for a short time longer (a few seconds) the skin assumes a white, dried, parchment-like appearance. This is the time to operate. If you proceed further superficial necrosis may result. The application is sometimes succeeded by itching and an urticaria-like eruption. It is employed in all kinds of small operations—circumcision, opening abscesses, and in neuralgia, lumbago, muscular pains, gout, etc. In scraping lupus it is best applied by means of a camel-hair brush, as special parts can then be anesthetized with perfect precision.—*British Medical Journal.*

IODOFORM GAUZE IN POST-PARTUM HEMORRHAGE.—Dr. O. Piering, assistant in Prof. Schauta's obstetric clinic in Prague, has published his experience in the employment of Dührssen's plan of plugging the uterus with iodoform gauze for *post partum* hemorrhage due to an atonic condition of the organ. Dührssen recommends that, when *post partum* hemorrhage comes on the bladder should be emptied and forcible friction and intra-uterine irrigation of hot

or cold water, along with ergotin in hypodermic injections, employed; that, if the hemorrhage still continues, the cavity of the uterus should be filled with iodoform gauze, the irritation produced by this setting up active and permanent contraction. The method has, according to Dührssen, the advantages of great certainty, complete harmlessness, and facility in its performance. Olshausen, Veit, and Tehling, however, say that the contraction set up is not always permanent, and that the method is not so free from danger as Dührssen believes. In consequence of these conflicting views, Dr. Piering resolved to give the method a trial, and he details several cases in which he employed it with complete success. In no case was any harm done by it. He advises that resort to the plug should not be too long delayed, and he prophesies an important future for the plug of iodoform gauze in *post-partum* hemorrhage. *London Lancet.*

THE CONTINUOUS USE OF BLUE MASS IN SMALL DOSES.—The patient was a man of large frame, about fifty-five years of age, whose occupation or habits prevented him from getting sufficient sleep, as he rose each morning by 4 or 4:30, although he did not retire until 11 P. M. Evident signs of heart failure began to show themselves about a year ago, with dyspnea on exertion, difficulty in going up stairs or lifting weights, increasing edema, and albumen in the urine without casts. He had been treated in various ways, chiefly by iron in conjunction with diuretics, as acetate of ammonia or nitrate of potash. The symptoms steadily increased until the edema invaded the trunk and genitals, and he was almost confined to his room. When he came under treatment repeated trial was made with similar remedies, but finding no good result, and that the digestive system was in fairly good condition, the following pill was ordered:

Mass. hydrargyri, pulv. digitalis, cinchonidæ sulph., aa gr. xl. Fiat mass. et div. in pil. No. xl. S: One pill three times a day.

These pills were begun November 10th, and were continued regularly until November 22d, by which time the full number had been taken. He was also ordered to remain in bed until 7 o'clock each morning, thus securing at least eight hours' rest. During the day he was directed to lie down for one hour.

The only appreciable action of the remedy was a steadily improving tone of cardiac action with increased secretion of urine, with diminished proportion of albumen, and progressive decrease of edema. By November 22d all the symptoms had disappeared, urine was free from albumen, and the edema was en-

tirely gone. There had been no purgation and no evidence of mercurial action. The change in his appearance was extraordinary, as he seemed shrunk away, showing that the entire body had been infiltrated with serum. He felt weak, but the only remedy ordered was an ounce of whisky twice daily. Upon this he rapidly regained his strength, and now seems in very good condition and ready to return to work.

I have in some cases of general edema, both with weak heart and with organically diseased heart, given the above combination for much longer periods than in this case, and with remarkably good results, but in other cases it becomes necessary to suspend very soon, chiefly owing to gastric disturbance. If the mouth is frequently washed with a solution of chlorate of potash, there does not seem much danger of pytalism, but a constant close watch for this should be kept up. The remedies should always be joined with carefully regulated hygiene and diet.—*William Pepper, M.D., University Magazine.*

PHTHISIS IN HIGH ALTITUDES IN SWITZERLAND.—From a report by Dr. L. Schrötter on the distribution of phthisis in Switzerland, it would seem that the inhabitants even of high altitudes are by no means so free from phthisis as we are perhaps wont to suppose. The tables of deaths for the eleven years 1876–1886 show that phthisis is endemic in every part of Switzerland, not a single district (Bezirk) being free from it. On the whole, the deaths from this cause are fewer in the high than in the low-lying districts, but it can not be said that the mortality from this cause is inversely proportionate to the altitude. Wherever there is a large industrial population the phthisis mortality is considerable. Industrial populations always suffer much more than agricultural populations where the altitude is the same.—*Lancet.*

RESORCIN IN WHOOPING-COUGH.—Dr. Justus Andeer, who had previously written in recommendation of the employment of resorcin in whooping-cough, has recently published some fresh cases illustrating, as he believes, the advantages of this method of treatment. One of the patients was his own child, a little girl of seven years of age, who, during an epidemic of measles and whooping-cough, was attacked by the catarrhal form of the latter affection and suffered severely for a week, notwithstanding a change of climate. He then prescribed an ounce of a two-per-cent solution of resorcin four times a day, part of which solution

the child was to gargle and part of which she was to take. This very soon began to show signs of affecting the course of the disease, for on the second day the fits of coughing very perceptibly diminished, and in eight or ten days the child was free from cough. Five other children, who had been unsuccessfully treated for some time, immediately began to improve under the resorcin treatment. In the case of a baby of six months old a sweetened solution of the strength of one half per cent was given by means of a feeding-bottle, and answered admirably.—*Ibid.*

CHLORATE OF POTASSIUM.—Dr. Coghill, in a paper read at the ninth International Medical Congress, confirmed the results of Wöhler that chlorate of potassium is excreted in the urine unchanged and in the full amount ingested, and hence does not give off oxygen to the tissues. Nevertheless, besides its local uses, he finds it of value in preventing abortion in all cases of pulmonary insufficiency, as phthisis, chronic pneumonia and bronchitis, in anemia, chlorosis, and general malnutrition. In addition it has an antiseptic action in diseases of the genito-urinary tract, where there is suppuration or purulent or phosphatic urine.—*British Med. Journal.*

EXPERIMENTAL ARTICULAR TUBERCULOSIS. Dr. Pavlovski, in a paper recently published in the *Vratch*, gives an account of some researches he had made in Professor Pasteur's laboratory on the development and spread of articular tuberculosis, his special object being to find out whether the tubercle bacilli develop in the white corpuscles or in the connective tissue or in both. In order to carry out his research he prepared cultures of tubercle bacilli in peptone glycerine and injected the virus into the knee-joints of guinea-pigs, these joints being examined after the lapse of from half a day to eight weeks. After twelve hours the bacilli could be detected both in the connective-tissue corpuscles and in the white-blood corpuscles. It was found that the white corpuscles play an important rôle in the production of tubercle, undergoing a series of progressive changes until they assume an epithelioidal character, experimental tubercle consisting of epithelioidal cells due both to white blood corpuscles and to connective-tissue corpuscles. Dr. Pavlovski was also able to demonstrate the propagation of the bacilli along the course of the lymphatics, the nearer glands becoming first infected, and subsequently those at a greater distance.—*London Lancet.*

The American Practitioner and News

"NEC TENUI PENNÆ."

Vol. IX. SATURDAY, JANUARY 18, 1890. No. 2.

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H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the EDITORS OF THE AMERICAN PRACTITIONER AND NEWS, Louisville, Ky.

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DENGUE, OR INFLUENZA?

A noticeable feature of the prevailing epidemic is that the more prominent symptoms differ from those ordinarily present in influenza. In view of which, according to the *Lancet* of December 28th, certain French physicians ask, not impertinently, the question which heads this article.

"Thus it is asserted that catarrhal characters have been notably slight, the predominant features of the few days' fever being muscular pains, prostration, headache, and in some cases a scarlatiniform eruption. Now it is pointed out that dengue, an affection hitherto almost confined to tropical climates, prevailed extensively in Syria last spring, has since occurred widely in Constantinople, and even has been observed elsewhere in the South of Europe. This fact, added to the unusual features of the present epidemic," at least gives color to the notion that the supposed victims of *la grippe* are really in the clutches of dengue.

A paper on the Syrian outbreak of dengue, read before the French Academy, precipitated a learned discussion of the question among the assembled savants with about an even balance of opinion on the two sides.

Thus, M. Proust demurs on the ground that dengue has never been known to pass the limits

of 45° north and 25° south latitude. M. Rochard said that the prevailing affection was not dengue, because it lacked the articular pains and eruption characteristic of that disease; while, in the opinion of M. Colin, the symptoms exhibited by sufferers in the present epidemic are just like those noted in former epidemics of *la grippe*. On the other hand, M. Dujardin-Beaumetz, M. Bucquoy, and M. Bouchard put forth some facts that give weight to the dengue theory. M. Bucquoy, however, seems to have been the only physician present who had noted the articular pains, redness of the palate, and scarlatiniform eruption which constitute the grounds upon which the credentials of the present visitor have been challenged.

Further, the subject was discussed at the Medical Society of the Hospitals on the 18th of December:

"M. Legroux introduced the topic of the epidemic, and pointed out how it differed from classical influenza, catarrhal manifestations being exceptional, headache, ocular pain, nausea, colic, and fever chiefly marking it, and recovery following after two or three days in bed. He had seen some grave cases, and cited one of a lady in whom the pains in the head were so severe, with nausea, delirium, rapid pulse, and temperature of 102.2° F., that meningitis was feared. The symptoms disappeared in forty-eight hours under treatment by antipyrin. In children he had observed coryza or bronchitis, or more often gastro-intestinal catarrh. In every case the duration was shorter than ordinary influenza. M. Sevestre had noticed two types. In some, the minority, there were the features of ordinary influenza. Others were marked by the absence of catarrh of the respiratory passages, by intense pains in the head, eyes, and loins, and by fever. In one third of his cases there was an eruption on the face resembling either scarlatina or measles, and recalling dengue. In terming such cases *la grippe* the usual meaning of the term was altered. A writer in *Le Progrès Médical* (Dec. 21st), under the heading "*Grippe ou Dengue*," in which the outbreak among the employes at the Louvre at the end of November is stated to be the starting-point of the epidemic that rapidly spread through many large establish-

ments in Paris, refers to the descriptions given by Dr. Le Brun of the Beyrout epidemic of dengue, and suggests that both influenza and dengue are now prevailing in Paris. In particular the characters of an outbreak observed in a large scholastic institution in Paris are noted as closely approximating to the latter affection—sudden onset with frontal headache or orbital pain, difficulty in walking, pain in the limbs, etc.; rarely cough, but slight tickling in the throat; many having constipation, nausea, or even vomiting. The throat was congested, tongue dry, pyrexia high (102.2° to 104°), and by the end of the first day a scarlatiniform rash appeared, which became more like that of measles on the second day, when the fever slightly abated. The rash faded on the third or fourth day, when the patients were nearly recovered. In some cases, where the patients got up too soon, there were relapses of fever, with rigors and headache, but no fresh eruption. Desquamation was not observed in any case. In the *Gazette Medical* (Dec. 21st) Dr. de Ranse points to the discussions at the above-named Paris societies as justifying the hesitation at first expressed by the Russian physicians before concluding that the epidemic at St. Petersburg was influenza. He propounds three questions, which, shortly put, are: 1. Are influenza and dengue distinct diseases, or only the same disease modified by climate? 2. May they develop simultaneously in epidemic state in the same region and combine to form a hybrid affection? 3. If entirely distinct, is the present epidemic influenza or dengue? In answering these questions and concluding in favor of influenza, he rightly says that the exceptional occurrence of some cases showing a rash is not enough to ally it with dengue, and believes that some of the earlier recorded epidemics of influenza would show as marked an absence of pulmonary catarrh as is now presented."

It would seem, if we are to take the opinion of the French lights in medicine, that the victims of the present epidemic are doomed to suffer without the satisfaction of knowing what is the matter with them; but since the treatment advised and now universally practiced is effective, the patients will be glad to avail

themselves of it now and let the doctors name the disease at their leisure. It might have been stated in the above discussion that the promptness with which the fever yields to quinine gives weight to the opinion of those who believe the disease to be dengue.

Notes and Queries.

LOUISVILLE MEDICAL SOCIETY.—As secretary of the Louisville Medical Society I feel called upon to ask certain questions not only of the Fellows of the Society, but of the whole medical faculty of Louisville.

First, it seems proper to ask the Fellows of the Society whether, through their neglect, it is to pass out of existence?

Not meaning to cast any reflection upon any other organization, I would ask the Fellows, do any or all of these limited societies fill the needs that are claimed for an unlimited society?

Is the profession of Louisville individually so strong that it does not need these gatherings to keep it up with the times?

Other cities claim great good from large organizations, on account of the exchange of thought and the benefit arising from stimulation of discussion. Cities as large or larger than ours boast of their well-organized and splendidly governed societies accomplishing much each year for the advancement of their professional learning.

But a short while back a Cincinnati journal gave a glowing account of the work that its general society had done, and spoke of the effort that was successfully being made to have a well-equipped library in connection with the society.

Is it not important to the general profession of Louisville that we have such an organization open to every reputable medical man?

If the interest of the profession could be aroused, and instead of about sixty inactive members we could increase the Society's strength to a hundred active, earnest workers determined to assist and be assisted in the search after knowledge, is it not certain that much benefit would accrue to us?

If you decide in the negative, if you believe that limited societies serve a better purpose, if you believe that the Louisville Medical Society has outlived its day of usefulness, then let it cease to be.

If you decide in the affirmative, then do your duty by it. Make up your mind to attend its meetings regularly, and urge others to do the same. Do not give a half-hearted assent that you believe it should be maintained, and then rob it of your support.

Either give us encouragement to go on with weekly meetings or give us your permission to declare the Society out of existence and thus relieve the officers from their false positions. EWING MARSHALL, M.D.,
Secretary.

ASSOCIATION OF AMERICAN ANATOMISTS.—The second annual meeting of the Association of American Anatomists was held December 26, 27, and 28, 1889. The session was opened by Dr. Joseph Leidy's address, followed by that of Dr. Harrison Allen, the chairman of the Executive Committee. The following papers were read: "Muscular Anomalies of the Infra-Clavicular Region," by Frank Baker, M. D., of Washington; "Presentation of Histological Specimens," by George A. Piersol, M. D., of Philadelphia; "The Supra-Sternal Rib," by D. S. Lamb, M. D., of Washington; "The Relation of the Thalamus to the Parocele, Especially in the Apes," by Burt G. Wilder, M. D., of Ithica; "The Spinal Nerves of the Cat," by T. B. Howell, Ph. D., of Potsdam, N. Y.; "The Transition of Stratified Columnar Epithelium," by Simon H. Gage, of Ithaca, N. Y.; "A Series of Casts of the Duodenum," by Thomas Dwight, M. D., of Boston; "Notes on Dwarfs," by Frank Baker, M. D., of Washington; "The Physical Theory of the Genesis of the Long Bones and Articulations," by John A. Ryder, M. D., of Philadelphia; "Individual Skeletal Variations," by F. A. Lucas, of Washington, D. C.; "On the Value of Studies of Variation," by Harrison Allen, M. D., of Philadelphia. In addition to the papers noted above there were presentations of articles and communications by Drs. Hor-

ace Jayne, E. C. Spitzka, J. L. Wortman, Thomas Dwight, Burt G. Wilder, George McClellan, S. J. J. Harger, and A. H. P. Leuf. The meetings were held in the Biological Department of the University of Pennsylvania.

LA GRIPPE IN BOSTON.—Simultaneously with the appearance of influenza in Europe an epidemic of this disease has been raging in Boston and vicinity. Thousands of cases have been reported. The disease comes on like a severe cold, but with much greater prostration of the muscular forces, back-ache and insomnia; considerable fever generally attends it from the first. In some it takes the form of a severe cold in the head, with headache and eye-ache; in others bronchial symptoms predominate; in others muscular pains predominate, and the mucous membranes are almost immune; in all there is loss of appetite and more or less gastric disturbance.

While resembling malarial fever in being of atmospheric origin, and also in its wide diffusion as well as in its probable contagiousness, influenza, unlike malaria, has no clearly defined native haunts, no known telluric source. Every thing leads logically to the conclusion that the causal agency must be referred to an atmosphere vitiated by a living organism which multiplies and propagates itself *ad infinitum*, which affects individuals without regard to age or constitution, smites them suddenly without any period of incubation, then disappears after a period of from four to eight weeks of prevalence, and does not generally come again until after the lapse of several years.

Care as to diet, care as to work, care as to the hours of sleep, etc., are important in times of epidemic, if one would be fortified against the invasion of the unseen atmospheric foe. It would seem hardly needful to inculcate the necessity of wearing warm clothing and avoiding the depressing influence of cold, and especially damp cold, but physicians who would be counsellors in hygiene can not too much insist on these matters.

Attention to the bowels, rest in bed, a bland diet, phenacetine or antipyrin for the pains, some expectorant for the cough, sulphonal or Dover's powder for the insomnia, quinine as a tonic, and the self-limitation of the process, result usually in a fair degree of comfort and convalescence, with a diminished vigor, in from three to six days.—*Boston Medical and Surgical Journal*.

THE American Physiological Society ended its annual meeting, held in New York, in the College of Physicians and Surgeons, December 29th. The Society elected the following council: H. P. Bowditch, J. G. Curtis, H. N. Martin, S. Weir Mitchell, and H. H. Donaldson. The management is vested in this council, and the council appoints from its members the president of the Society, and a secretary, who also acts as treasurer. Among the new members elected was Major George M. Sternberg, Surgeon U. S. A., who was the chairman of the recent Yellow Fever Commission at Savannah.

THE PANDEMIC OF INFLUENZA.—However it may have been a week or ten days ago, we imagine few medical observers, and even fewer of the laity, can be found who to-day hesitate to believe that a large part of the United States is already invaded by the atmospheric wave which has swept over Europe and is carrying with it what, for the want of a better name, we must still call the "influenza." The name in fact, however, is not such a bad one, in so far as it well indicates our continued ignorance of the real etiology of the affliction.

The rise, the spread, the course, the symptoms of the frequent previous epidemics and pandemics of the disease have been often and well recorded, and may be found by the curious in the writings of numerous and excellent authorities on the subject. It is not with these points, nor yet with the treatment, that we wish to deal at present, but rather to impress upon our readers the importance of observing and recording, as carefully as the great demands at such a period upon the time and strength of prac-

titioners will permit, the cases they are called to. There are some especial points upon which more light is needed, and upon which more light may thus be thrown. Any observations which bear upon the accompanying insomnia or upon the question of contagiousness should be noted with precision. The questions of relapse, of recurrence, of remission, of second attacks after complete recovery from a first attack, should all receive further elucidation from the present outbreak. The duration of the epidemic in different localities, its behavior with reference to climatic changes, the direction and force of the winds, etc., merit close attention. It can scarcely be doubted that the poison is a microphyte multiplying in the air, and yet there is reason to believe that it sometimes travels, and that not slowly, against the course of the winds. It will be interesting to learn whether the "influence" was encountered by our European "Squadron of Evolution" in its voyage across the Atlantic. In 1782 a similar poison was found by a British squadron cruising in the Bay of Biscay, and the vessels returned home with crews in a disabled condition. We have heard that a month ago cases occurred on a steamer crossing the Pacific Ocean from Japan to San Francisco.

There has been a somewhat greater variation in the symptoms in different cases than is ordinarily encountered in most acute diseases dependent upon recognized specific poisons, although very possibly it may prove that these may be classified under two heads. It is desirable to note how far the present cases of influenza resemble and wherein they differ from dengue.

It must of course be borne in mind that the mild, moist, open, variable season which has thus far prevailed predisposes to catarrhal troubles; and again, that a prostrating affection like this "influenza" brings as an accompaniment or sequel to the weak, the intemperate, the careless and the aged, the bronchitis and pneumonia of our ordinary experience. It is, on the other hand, remarkable that, in not a few of the severest

cases of "influenza" lately encountered, catarrhal affections of the mucous membranes have been very slight.

We are quite sure that the "influenza" began to claim victims in Boston at least as early as December 17th, at which time, strange to say, it had apparently not been noticed in London. In Birmingham the disease was not reported as an epidemic until near the end of December. In New York the development seems to have been later than in Boston. If the shorter distance between Boston and the continent of Europe is the explanation for our earlier invasion, the long immunity of the British Islands is still more curious.—*Boston Medical and Surgical Journal*.

THE LIABILITIES FOR INJURIOUS PATENT MEDICINES—The Supreme Court of Georgia has just rendered a decision, says the New York Herald, which is likely to attract wide-spread attention and have a salutary effect on the preparation of patent medicines. It holds that the proprietor of such a preparation is liable in damages for injury done to any person who takes the medicine according to the directions.

This liability does not fall upon the druggist who sells the medicine, but it attaches to the proprietor, even when the consumer buys not from him directly but from the druggist. Here is the view the court takes of the matter:

"These proprietary or patent medicines are secret, or intended by the proprietors to be secret, as to their contents. They expect to derive a profit from such secrecy. They are, therefore, liable for all injuries sustained by any one who takes their medicine in such quantities as may be prescribed by them.

"There is no way for a person who uses the medicine to ascertain what its contents are ordinarily, and in this case the contents were only ascertained after an analysis made by a chemist, which would be very inconvenient and expensive to the public.

"Nor would it be the duty of a person using the medicine to ascertain what poi-

sonous drugs it may contain. He has a right to rely upon the statement of the proprietor, printed and published to the world; and if, thus relying, he takes the medicine and is injured on account of some concealed drug of which he is unaware, the proprietor is not free from fault, and is liable for the injury thereby sustained."

In rendering this opinion the court said that it could find no American case in which the precise question had been decided before.—*Ibid*.

HYPNOTIC SUGGESTION IN HYSTERICAL PARALYSIS; HYPNOSCOPE.—In the St. Petersburg semi-weekly *Meditzina*, Dr. M. V. Pogorelsky, of Elisavetgrad, details a striking case of a hospital nurse, twenty-three years old, with hysterical paralysis of all the limbs, body, and bladder, which was cured by ten sittings of hypnotic suggestion (during the course of twenty-four days), after all ordinary means (electricity, oxygen inhalations, strychnia, steel, etc.) had utterly failed to bring any relief. A great improvement, viz, return of movement in the upper limbs, and, to a slighter degree, in the legs, was obtained even after the very first *séance*, which fact, by the way, enabled the author to at once settle the differential diagnosis, since some of his colleagues had regarded the case as one of post-diphtheritic paralysis. The same author recommends a simple hypnoscopy test. As is known, out of every 100 persons only 40 can be brought into a hypnotic state (that is, they are "mediums"), while the remaining 60 can not be hypnotized by any procedure in vogue (Obersteiner). In view of this fact, many attempts have been made in striving to discover some means by which one may make an easy and rapid differentiation between a medium and a non-medium. Diagnostic appliances of the kind, or "hypnoscopes," were proposed, for instance, by Gessman, Marcy, Ochrowiet, etc. Starting from Ochrowiet's principle, Dr. Pogorelsky suggests the following test, which gave satisfactory results in scores of cases experimented upon by himself. He takes an ordinary middle-sized horseshoe

magnet, and, while holding it vertically, orders the patient to place his or her forefinger in the outlet in such a manner that the ball should look downward and the lateral aspects of the phalanx come to rest lightly on the respective inner surfaces of the branches. The patient's forearm and hand should be placed on a table and remain motionless. Be the person experimented upon a medium, he or she very soon (in from one to seven minutes) commences to experience peculiar sensations about the finger, such as pricking, twitching, pressure, numbness, cutting pain, etc., which not unfrequently spread to the palm, other fingers, and even sometimes up the forearm, arm, and down the whole corresponding side of the body, including the thigh, and ultimately may involve the opposite hand, etc. No phenomena of this kind are induced by the magnet in the case of non-mediums.—*Medical and Surgical Reporter*.

Dr. JAMES H. HUTCHINSON died suddenly at his residence in Philadelphia, December 27, 1889, of uremia.

Dr. Hutchinson belonged to one of the oldest families in Philadelphia. He was born at Lisbon, Portugal, in 1834, when his father was U. S. Consul there. In early life he was sent to a boarding-school in New Haven, Conn. Later he returned to Philadelphia and entered the University of Pennsylvania, from which he was graduated in arts and in medicine in 1858. He then served a term as resident physician of the Pennsylvania Hospital, after which he spent a year in Europe, visiting the hospitals in Paris and Vienna.

Upon his return to Philadelphia he took up the practice of his profession and became prominent in a number of professional, philanthropic, and educational institutions. He was Vice-President and Honorary Librarian of the College of Physicians; was an influential Manager and Chairman of the Household Committee of the Pennsylvania Institution for the Instruction of the Blind; was a Trustee of the University of Pennsylvania, and took a deep interest in its progress.

He was a Director of the Philadelphia Library, and was an attending physician at the Pennsylvania Hospital and the Children's Hospital. He was also a vestryman of St. James' Protestant Episcopal Church. He leaves a widow and five children.

HYDERABAD CHLOROFORM COMMISSION—The following telegram from Dr. Lauder Brunton appears in the *Lancet*, December 7, 1889: "Four hundred and ninety dogs, horses, monkeys, goats, cats, and rabbits used. One hundred and twenty with manometer. All records photographed. Numerous observations on every individual animal. Results most instructive. Danger from chloroform is asphyxia or overdose; none whatever direct." These results apparently indicate such a complete reversal of the view held by Dr. Lauder Brunton at the time he left England (that one of the dangers resulting from chloroform is death by stoppage of the heart) that the details of the experiments made by Dr. Brunton, and the reasons for the conclusions he has evidently arrived at, will be awaited with the greatest interest by the profession.

PSEUDO-HYDROPHOBIA.—It is reported from New York, under date of December 19th, that a boy, fifteen years old, died that morning at Bellevue Hospital, a victim to the fear of hydrophobia. He was bitten on the hand about two weeks before, and soon became overcome by the fear that he would have hydrophobia. The day before he died, while preparing to go to work, he suddenly began to stare wildly about him, to shout and gesticulate, and soon he tried to throw himself from a window. His family caught hold of him, and a desperate struggle ensued. Two policemen were summoned, and it required the exercise of all their strength to bind and handcuff him. In this condition he was removed to Bellevue Hospital. Throughout the day the lad continued violent and made repeated attempts to bruise and injure himself by throwing himself on the floor.

Dr. Douglass, of the hospital, said that there had not been the slightest symptom

of hydrophobia about the boy, but that the fear of that dreadful disease had without doubt unsettled his reason. His fear of hydrophobia had been greatly intensified by reading an account of the death of another boy.—*Medical and Surgical Reporter*.

TYLER GRIPPE.—The following emanates from Washington, possibly from a disappointed office-seeker: "Some of our oldest inhabitants will doubtless remember the death of General William Henry Harrison in 1841, then President of the United States. He was succeeded by the Vice-President, John Tyler, who was elected on the same ticket, as a Whig. Tyler did not give satisfaction to his party; in fact, his official actions as president caused a storm of opposition to him. Soon after his accession to the presidency the country was invaded with a disease similar to that now raging in Europe and this country. It was given the name of of 'Tyler gripe.' In view of the growing unpopularity of the present administration, particularly in the ranks of the Republican party, may not this be the 'Harrison gripe'?"

THE CARRIAGE OF INFECTION BY PHYSICIANS.—With reference to the communication of contagious diseases by physicians, a question that is now being agitated in England, a correspondent of the British Medical Journal writes that "although it can not be denied that it is possible for a medical man under some circumstances to convey infection from one patient to another, the risk of this taking place is, if ordinary precautions be taken, almost *nil*. This is clearly shown by the experience at the London Fever Hospital, where the resident medical officer in the discharge of his duties is constantly passing from the scarlatina department to the departments for measles, typhoid, diphtheria, etc., and yet it has never been found that he transfers these contagia, although he would be much more likely to do so than an ordinary practitioner, inasmuch as the poison is necessarily more concentrated in a fever-ward than in a room where only one patient is treated. The med-

ical attendant is not, as a rule, brought into sufficiently close and prolonged connection with his patient for his clothes to receive any very large amount of the contagion, and a short exposure to the open air is generally sufficient to disinfect him. Nurses, no doubt, whose clothes from prolonged and constant contact with the patient become saturated with the poison, may readily convey infection. The only precautions taken by physicians to the fever hospital, and a long experience has shown them to be quite sufficient, are to wear a special outer garment and cap in the wards, but even this is not done by the resident medical officer.

"For all ordinary purposes washing the hands in a disinfecting solution and a short exposure to the fresh air will, I am sure, sufficiently disinfect the practitioner, though it is advisable that he should change his coat, and he ought, as far as possible, visit his infectious cases last.

"In the case of smallpox, however, where the poison is present in a liquid form, and may possibly get smeared on the clothes, a change of clothes is necessary.—*Medical News*.

DR. RICORD has left the following legacies besides those we have already noted: Of 10,000 francs to the Academy of Medicine of Paris, the object of which is to found with the interest a biennial prize in the name of the testator; and to the Société de Chirurgie 5,000 francs for founding a biennial prize; to the Association Générale des Médecins de France 10,000 francs; to the Hôpital du Midi his extensive library, as a token of gratitude and as a souvenir of his twenty-nine years' service at that hospital. The Hôpital du Midi is henceforward to be called L' Hôpital Ricord.

CHOLERA AND ITS PILGRIMAGES.—The Indian Medical Gazette says that, some months after the outbreak of cholera at the Pearl Fisheries of Ceylon, there has been a fresh outbreak of cholera on the island, brought about by a Roman Catholic pilgrimage to St. Annas, at Palleeudaya. This pilgrimage seems to have been attended by people from

all parts of the island, including the Northern Province and Southern India, where cholera was known to be present. The history of the outbreak is similar to those which occur so frequently in India. Immediately the pilgrims reached St. Annas, deaths from cholera began. A panic ensued. The Roman Catholic Bishop broke up the festival; the crowd was dispersed and carried cholera with them wherever they went.—*Journal American Med. Association.*

WHO WAS YOUR GREAT-GRANDFATHER?—The Detroit Journal desires to receive, by postal card, the address of all living male and female descendants of Revolutionary officers and soldiers of 1776, and, when possible, the name and State of the ancestor. Wonder if W. H. Brearley, proprietor of the Detroit Journal, is contemplating a raid upon the national treasury?—*Ex.*

THE State Medical Society of Kansas will hold its next annual meeting at Salina, on Tuesday, May 13th.

PROFESSOR STOWELL urges medical students to dissect cats, as a means of studying the arrangement of nerve cells in the spine.

A MAN in Gouverneur, N. Y., died from the effects of atropine, which a druggist had put up in mistake for antipyrin.

INFLUENZA has reached Denver, where seventy-five per cent of the people suffer from it.

THE common field thistle is said to be a remedy for neuralgia.

NEW YORK had ninety-five deaths from pneumonia the week ending January 4th.

SPECIAL NOTICES.

SUBSTITUTION IN PROPRIETARY REMEDIES.—In Kansas City recently seven druggists were each fined \$500 and costs for counterfeiting a trademark preparation, the ingredients of which are well known. This suggests some thoughts on a subject which appears to have received but little consideration from the profession in general. Is it proper for the physician knowingly to countenance the extemporaneous preparation by his druggist of such remedies, the formulas of which have been given to the profession and approved by them? In other words, is it proper to allow

the substitution of an extemporaneous preparation for one with which we are familiar, upon whose effects we have learned to rely?

We believe that the question is very similar to the one of substitution in general, upon which there is little difference—even among doctors.

It is reasonable to suppose that the company manufacturing a remedy of this kind, dependent as it is for its sale on the satisfaction which it affords to the profession, and the approval which they in turn bestow on it, would ever observe the strictest precautions in the procurement and selection of the drugs and other materials used in its make-up, and would guard most religiously the utmost precision and regularity in the various methods and steps of its preparation in order to attain unvarying uniformity and reliability of effects. And it is perfectly patent that the wishes of the profession in this regard are much more liable to be fulfilled under the above conditions than when the desired remedy is prepared under the vacillating conditions of all grades of drugs, degrees of skill, etc., to be found in drug stores.

It is a fact familiar to all of us that the most ordinary prescription which we may compose, when filled at different pharmacies, or even at the same pharmacy at different times, may appear so different as to call forth the complaints of our patient, who never believes the repeated bottle is quite as good as the first one; indeed, he frequently thinks it is a different preparation, and is firmly convinced that the druggist has made a mistake and given him the wrong medicine.

We all know how essential it is to have certain prescriptions prepared in a certain way, even aside from the manner in which the general rules of pharmacy would govern their preparation.

We believe, therefore, that the substitution or proffer by the druggist of a home-made preparation of this kind for the one which is prescribed should be deprecated by the profession as emphatically as is its cousin, the substitution of one drug for another.—*Weekly Medical Review, St. Louis, Mo., December 14, 1889.*

WARNER'S ANTISEPTIC PASTILLES.—Following a suggestion recently made by Dr. C. Seiler in the *Medical Record*, Messrs. William R. Warner & Co., the well-known pill and compressed pastille manufacturers, of Philadelphia, are now placing on the market antiseptic pastilles for the treatment of certain nasal affections. These pastilles are not only powerfully antiseptic and comparatively innocuous, but also distinctly deodorant, as sodium bicarbonate, sodium bichlorate, sodium benzoate, sodium salicylate, menthol, and oil of wintergreen enter into their composition. One of the pastilles makes 2 oz. of a lotion or spray for the nostrils, and it is, according to Dr. Seiler, "sufficiently alkaline to dissolve the thickened secretion adhering to the nasal mucous membrane, and, as it is of proper density, it is bland and unirritating, leaving a pleasant feeling in the nose. As an antiseptic and deodorizer it is also far superior to Dobell's solution or any other non-irritating deodorizer and antiseptic." The pastilles have been introduced into England by Messrs. F. Newbery & Sons, of King Edward St., London, E. C.—*The Chemist and Druggist.*

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., FEBRUARY 1, 1890.

No. 3.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

RESECTION OF THE HIP-JOINT FOR TUBERCULOUS COXITIS.*

BY H. HORACE GRANT, A. M., M. D.

Lecturer on Surgery, Kentucky School of Medicine, Surgeon to Louisville City Hospital, German Prof. Orphan Asylum, etc.

Recently published discussions of the various methods of treating disease of the hip-joint have indicated not only a wide difference of opinion, but a somewhat acrimonious freedom of speech in some quarters, along with which goes an intimation by one or two orthopedic specialists that the general surgeon is something too ready with his knife and a little tardy with his knowledge. Without doubt orthopedic surgery is a prosperous and progressive special study, but, as may be said of other departments of no less dignity, its authorities are not always in accord regarding either pathology or treatment.

There are three important questions in the consideration of operative interference in disease of the hip:

1. Its application to cases in the first and second stages.
2. Its ultimate results as to function.
3. Its influence on general tubercular infection.

Dr. A. M. Phelps, of New York, in a recent paper † before the Academy of Medicine, reiterates the views of Volkmann and König, that coxitis is due to accidental inoculation, the presence of bacilli in simple

inflammatory products occasions tubercular degeneration, and that the so-called scrofulous or tuberculous diathesis is not a necessary nor usual precursor. If this view be correct, it almost follows as a matter of evident wisdom that, in those cases progressing unfavorably under the mechanical treatment appropriate to the earlier stage, steps should be taken without delay to remove the disease by operation. Depending on circumstances, this slight, simple, inflammatory condition becomes presently tubercular, invades with variable rapidity the capsule, the cartilages, the immediate bony surfaces of the joint, until, with degeneration of perhaps half the femur and perhaps destruction of the acetabulum, a general tuberculous condition supervenes in a considerable proportion of cases treated by any expectant plan. Nevertheless it is a fact that many of these cases, as is insisted by Judson* and Phelps, † eventually recover with more or less deformity and loss of function after suppuration and spontaneous evacuation. It is more rational and scientific to adopt the methods of König and Heuter, as well as our own Sayre, with a host of others in both continents, that excision is indicated so soon as it is evident suppuration is inevitable or has occurred.

It is manifestly impossible to compare in a satisfactory manner statistics from cases reported by many surgeons of varying skill, operating in several ways on diseases of the hip resulting from a variety of causes in different stages, and after imperfect observation. Yet it seems fair to state, (1) That excision of the hip-joint under antiseptic precautions is a simple and safe operation. (2) That at least forty per cent of cases of

* Read before the Louisville Surgical Society, December, 1889. See page 76.

† New York Medical Journal.

* New York Medical Journal, August 31. † Loc. cit.

the suppurative form terminate disastrously under the expectant plan.

Perhaps no surgeon, either general or special, advocates operative interference before patient and thorough measures of rest, extension, and the various approved mechanical treatments, together with such constratives as the constitution internally may demand, have failed in the earlier stages of hip disease. After this failure, when suppuration and disintegration are progressing, radical measures seem indicated. As definite data can not, from the nature of the varied conditions, be had, it is more philosophical to apply the well-known principles which govern surgery under like circumstances in other regions, viz., removal as far as possible of diseased tissue, and the establishing of drainage and irrigation.

The elaborate statistics collected and analyzed by Yale,* given under partisan hands, fail, as he all but confesses, to settle any point in question. The astounding claim of Judson,† that extensive abscesses in the joint may be absorbed unopened, can be but a snare to the timid if looked for as any thing but a result of rarest exception. And even admitting that undisturbed abscesses and sinuses do in a considerable number of cases, after spontaneous evacuation and unassisted repair, turn out well, does it seem reasonable to decline to assist nature and hasten recovery here, with the record before us of the value of like assistance in similar conditions in other regions with the promise of more rapid improvement and saving of tissue?

A large proportion of these cases passing into the second and third stages perish under any treatment, but there is no evidence, either speculative or statistical, to indicate any better results from the expectant plan than from resection, even in those cases which promise improvement, while the whole weight of surgical principles indicates early operation.

The periodical literature of the past few years abounds with discussions of this subject, and as I have no wish to burden you

with the *pro* and *con* contained therein, I present only the conclusions drawn from a study of it.

Two cases operated upon in the second stage illustrate in a small way the advantages often gained in desperate cases.

CASE 1. W. R., aged seven years, seen in August, 1886. His temperature had ranged about 100° for some weeks, frequently 102°. Evidence of general tuberculosis in both lungs. The child's appearance indicated death within a month. Operation next day. About two ounces of pus found within the joint; the capsule was completely destroyed, the head of the bone almost gone, and great trochanter honey-combed. The femur was sawed off about an inch below trochanter; sound bone found. The improvement was rapid and marked; in two months the sinus had healed, the child was free of pain, and sat up most of the day. He died, however, of general tuberculosis thirteen months after the operation, without any return of the local disease.

Case 2. R. M., aged thirty-two, entered Louisville City Hospital May, 1889; symptoms of hip disease for three years; an invalid unable to work for twenty months. Pus discharged through two sinuses; temperature 101°; appetite gone; hectic flush, and constant thirst. After a few days I cut down on the joint before the classes at the hospital; removed five inches of the femur; scraped the acetabulum. The bone, both of the femur and acetabulum, was utterly disintegrated and crumbled under the finger like wet bread-crumbs. The sawed end of the femur was found to contain pus. This man's condition was hopeless under any circumstances, but he was benefited by the operation in diminished suppuration, lessened fever, and improved appetite. He declined an amputation of the leg at the hip-joint, a step which I had some hope would further relieve him by removing the source of disease in the femur. On the first of this month the patient left the hospital, four months after the operation, his condition being better than when he entered it, though without prospect of much improvement.

* Annals of Surgery, July, 1886.

† Loc. cit.

Regarding the second point: In the majority of cases operated upon early after the occurrence of suppuration in the joint, the results are better after resections than after the expectant plan. The shortening is perhaps as great, but there is better motion and more usefulness of the limb. Many brilliant results are recorded after such operations in our current literature.

Prof. Holloway, in a private communication, tells me of an unrecorded case in which he operated five years ago, finding pus in the articulation and cutting off three inches of bone, with the result of a perfect joint. The patient, now a young man, pursues his occupation as a farmer, with no other support than a cork sole as compensation for four inches shortening.

Later on in the disease, when extensive destruction necessitates removal of much of the femur, a weak, flail-like joint may result after excision; but, as these are cases which usually die under the expectant treatment, any gain in comfort and prolonged life is to be regarded as so much victory.

Practically, after the second stage has developed it is conceded that the results of resection are more satisfactory as to function. Dr. Philps claims that cases seen early, when properly subjected to mechanical measures, should recover without deformity. But in long-continued destructive processes, shortening, contractions, cicatrices, and ankylosis in the cured oftentimes leave him little better off than the diseased.

A change in opinion is noticeable recently as to the effect of the operation on the general infection. A recent author, whose name has escaped me, publishes some elaborate statistics, partly from clinical observations of his own, and partly from a review of European reports. His statistics include eight hundred and thirty-seven cases of resections of joints, with twenty-seven deaths reported due to tubercular infection from operations. Even this small per cent it seems impossible to say would have escaped under other circumstances.

The bacilli multiply in the decomposed blood and products of acute inflammation

after surgical operations; but if careful antiseptic precautions are employed, it seems more reasonable to infer that the safety gained by removal of a considerable tubercular nidus would outweigh the dangers of multiplication in fresh culture.

Fowler, in a review of the subject of Resection of the Knee in Children, published in June, uses the following language: "In other words, we have to deal in these cases with what must be essentially looked upon as a form of disease progressive in its character, and which may, at any period of its existence, become as destructive to the individual as its prototype, carcinoma. In the course of time, sometimes occupying months or even years in a large proportion of cases, graver symptoms develop, and the question of operative interference, if it has not already occupied the surgeon's mind, is forced upon him. The importance of thoroughly eradicating the disease must be apparent, as well as the necessity, in order to accomplish this, of removing the joint surfaces *in toto*."

Bronson reports an operation of resection of the hip in a girl aged nine. She declined under expectant treatment, a marked tuberculous condition of both lungs developed, and she had constant elevation of temperature. In six weeks after excision she walked alone; in nine months the physical signs had almost disappeared from the lung, though at the time of operation the case was deemed hopeless.

Gerster reports twelve cases of total excision of knee-joint for tuberculosis, with eleven recoveries; one death from tubercular meningitis. All these cases were operated on in the stage of suppuration with sinuses.

In a review of the full literature of this subject I have deduced the following conclusions:

1. All hip cases not directly traumatic are tubercular.
2. It is wise surgery to proceed to operative measures with a view to resection in all cases of hip-joint disease not showing favorable progress under faithful mechanical trial.

3. The functional results are in every way comparable after resection with those of the expectant plan.

4. It is not proved that under careful antiseptics there is added dangers of general infection, but rather the contrary.

LOUISVILLE.

SACRO-ILIAC DISEASE.

BY T. L. BURNETT, M. D.

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This disease, of rare occurrence and obscurity, I am led to believe is most often due to traumatism; but here, as in most obscure subjects for diagnosis, the authorities differ widely, each sustained by convictions which are the result of a personal experience and observation. I am unable to call to mind any disease within the domain of surgical science with statistics more unreliable and etiology more vague, and, I may say, original with each surgeon; for one renowned operator will almost deny the existence of sacro-iliac disease, and another of equal fame will placidly report case after case, and even success after success; while a third, whose experience has been more worldly, will show his little group of cases with an occasional success as a reward for his most scientific exertions.

Having thus briefly apologized for the convictions I am about to express, I beg leave to refer to three cases which it has been my good fortune to treat within the past eight months, with a few remarks incident thereto.

Sacro-iliac disease has a train of symptoms which, while closely related to those of spondylitis, morbus coxarius, caries of the ilium, etc., differ widely from them in many particulars, and if it were not for the difficulty encountered in making a thorough examination on account of the pain incident to joint disease, the diagnosis would be easily made. The surgeon encounters many symptoms present in the above-named diseases, and many also which when unmasked form valuable leaders to a true diagnosis. In well-advanced sacro-iliac disease I have never seen a case where the weight of the upper portion of the body was not thrown to the sound side, thus relieving the diseased

structures in a great measure and forming a characteristic deformity of the disease; and likewise, I have never seen a case where the measurement of the limb was made from the anterior superior spinous process of the ilium to the internal malleolus that the lengthening was not found to be real and not apparent; nor have I ever seen a case where absolute fixation of the pelvis did not admit of comparatively free adduction and abduction. Of course, an inflammation of the adjacent structures is sufficient to account for a certain amount of pain. Lateral pressure of the wings of the ilia will invariably increase the suffering, whereas the force applied in the opposite direction will afford relief, and on making digital pressure the pain will be found to be most intense directly over the sacro-iliac joint. Abscesses, whether pointing anteriorly or posteriorly, when thoroughly investigated will frequently confirm a diagnosis of this disease. Like all medical or surgical subjects every case has a history of its own, but all, or a greater part of the above-named symptoms, will be found present in cases of sacro-iliac disease, with others equally as valuable to the diagnostician. In an examination for this disease nothing is more difficult than to create absolute fixation of the pelvis, and for this purpose I think it advisable to employ an intelligent assistant to manipulate the limb while the surgeon steadies the wings of the ilia, as the most accurate information is obtained from this position.

I have but little to say regarding treatment, as the rules governing joint diseases in general are applicable to this disease also, the cardinal points being rest, extension, and counter-extension. Should the disease be discovered early, counter-irritation will afford much relief. When the patient is not confined to the bed the thick-soled shoe, recommended by Sayre, for the sound side will be found to be of inestimable value, and where abscess has formed, the evacuation of the cavity, drainage, and the removal of dead bone are but natural and necessary surgical procedures.

The following cases have been subjected to the methods of diagnosis and treatment referred to above:

CASE 1. Julia R., nineteen years of age. This

young woman was violently pushed against the side of a stall while attempting to milk a cow during the early part of March last. She experienced no pain until four days later, when attempting to carry a small tub of water, she found locomotion to be exceedingly painful in the "region of the right hip." The same pain was experienced whenever an exertion in the way of lifting or bending forward was made. It grew gradually worse, and in the latter part of April the neighborhood physician was consulted, who gave a diagnosis of hip-joint disease, painted the part with iodine and enjoined as much rest as possible. The disease, however, continued a steady course, and on June 21st came under my care. She was in bed most of the time, but could manage to get about by means of a stick or crutch. The first examination was a casual one and favored hip-joint disease. But subsequent and thorough examinations suggested and confirmed a diagnosis of sacro-iliac disease, on account of the actual lengthening of the limb, the absence of adduction and eversion; a marked diminution of pain on adduction and abduction when the pelvis was fixed; excessive pain over sacro-iliac juncture under lateral pressure or digital pressure over the joint, although more or less tenderness existed over the entire gluteal region of the right side; pain with defecation; the presence of a large abscess plainly outlining Poupart's ligament when patient assumed the upright position, and later filling Scarpa's space. The patient gave a clear tubercular history, and there has been much emaciation in the past four months. Constitutionally she has been benefited by the judicious use of the hypophosphites, minute doses of mercury, and iron. The mechanical treatment comprised extension by weight and pulley, and thick-soled shoes, rest, and repeated aspiration of the abscess. Incision and removal of dead bone in this case has been postponed on account of the weak condition of patient. She has improved steadily under this treatment, and is up and about with the assistance of crutches.

CASE 2. John B., twelve years of age, while playing near a saw-mill in the east end of the city, fell between two large logs, and was unable to walk for several days. About two

weeks after (July 10th) he applied to me for treatment at the Branch Dispensary of the Hospital College of Medicine. He was on crutches, and when made to stand alone the weight of the body was thrown to the left side with an apparent lengthening of the right leg. The adduction and abduction of the limb while in the recumbent posture were exceedingly painful, but upon fixing the pelvis pain was much diminished. He had pain on micturition and defecation, and when compelled to lean forward. The tenderness over the sacrum and ilium extended quite to the hip-joint. Doubtful fluctuation was detected near the sacro-lumbar region, and upon introducing a trocar, pus was obtained. After ten days' delay the boy's mother consented to have the abscess opened, which was done immediately, when distinct disease of the sacro-iliac joint was detected extending well into the sacrum. The carious bone was scraped out and a fifteen-percent solution of the peroxide of hydrogen freely injected into the cavity, which was packed with boric acid and gauze. It healed three weeks later. I saw the boy twice afterward, each time showing a marked improvement over the last, and I have no reason to believe that the cure, so near complete, was not completed a short time after.

CASE 3. John W., twenty-six years of age, applied to me at the Branch Dispensary of the Hospital College of Medicine the 19th of last July, stating that he had strained himself while lifting in April last. At the time he had a sensation as though "something had given way," and suffered pain in the sacro-lumbar region for the remaining portion of the day. The next day the pain was more intense, continuing for several days; it gradually improved and he was able to resume his occupation as a carpenter. In a few days his trouble returned, though it was not so intense as at first. He remained around his home unable to work more than a day or two at a time, and was finally unfitted for work altogether. When I first saw the patient he walked with the assistance of a stick, the weight of the body being thrown to the left side. The same apparent lengthening of the right leg was present, and a large abscess was plainly outlined over Poupart's ligament. When placed in the recumbent position the lengthening was

found to be real, and adduction and abduction very painful, but markedly diminished by fixing the pelvis. The entire gluteal region was very tender, especially so over the sacro-iliac joint. A week later the abscess was opened, a tube inserted, and weight and pulley applied. About three weeks later the patient insisted upon getting up, which he did, and was able to get about with much more ease than at any time before. In spite of this unnecessary exercise he continued to improve, and on December 1st was making about half time at his trade. The cavity of the abscess showing no tendency to refill, the opening was allowed to close a month after evacuation.

LOUISVILLE, KY.

THE VALUE OF OCULAR SYMPTOMS IN THE DIAGNOSIS OF SYPHILIS.

BY S. G. DABNEY, M. D.

Professor of Physiology and Clinical Lecturer on Diseases of the Eye, Ear, and Throat, Hospital College of Medicine, Visiting Surgeon to Eye and Ear Department of Louisville City Hospital.

It is generally admitted that the diagnosis of constitutional syphilis must rest upon the co-existence or history of a number of symptoms more or less indicative of that diathesis. There are a few conditions, however, which point, even in the absence of any corroborative evidence, with great certainty to syphilis. I wish to call attention to some of these which are peculiar to the eye.

There is an affection of the cornea which is by many authorities believed to be pathognomonic of inherited syphilis; all agree that it is a strong indication of this condition. The disease is a diffuse interstitial inflammation of the cornea; the cornea acquires a "ground-glass" appearance, and may become so opaque as to lower the visual power to the counting of fingers at only a few feet. Both eyes are usually affected, and the disease runs a very tedious course, from several months to several years. The iris and choroid are prone to become inflamed also; if these complications are prevented by appropriate treatment the final result is usually good. It is not rare for this symptom to be the first observed to indicate the constitu-

tional disease, though writers on syphilis place it among the latest evidences of inherited taint. It usually occurs between the ages of five and fifteen, but has been seen as late as thirty. The following case, except that the affection began later than usual, presents a typical history:

Miss Z., aged sixteen, consulted me lately in regard to her right eye; it was somewhat sensitive to light, but otherwise caused little pain; there was decided ciliary injection, the iris was "muddy" and the pupil sluggish; the diffusely cloudy cornea presented here and there little points of darker opacity; the vision was reduced to counting fingers at ten feet. From this condition alone, without other symptoms and without personal or family history, the diagnosis is sufficiently certain to warrant antisyphilitic treatment, but on looking at the teeth of my patient I found the most typical Hutchinsonian upper middle incisors, wedge-shaped and with central notch. The mother told me that her daughter a few years before had suffered from a synovitis, which yielded to iodide of potash; an older sister had had a similar disease of the eyes which lasted about two years, but finally disappeared, leaving only a trace of corneal opacity.

Gummata in the eye are not very common, but can be occasionally recognized; they are oftenest seen in the iris, but sometimes in the ciliary region, or in the sclera further back.

The following case illustrates gumma of ciliary body and sclera:

Some six weeks ago Mrs. X. consulted me as to her left eye. I found over the upper inner section of the sclera, beginning a few lines from the corneal margin, a sharply circumscribed bulging prominence; it was very sensitive to touch and caused considerable pain; the overlying sclera was of a deep red color. The disease had begun about a week before and was growing rapidly worse. The same eye had long been blind from an extensive atrophic choroiditis involving the macula. Such an appearance was almost proof positive of constitutional syphilis, though no other evidences were to be de-

tected at the time. The scleral bulging, with its injection, pain, and tenderness, rapidly subsided under the use of mercury (hydrargyrum cum creta, 3 grains daily), and iodide of potash (30 grains daily). The lady told me that her first husband suffered from syphilis, and she believed had infected her; a letter recently received from her family physician corroborates this opinion.

Of plastic inflammations of the iris not less than sixty per cent are syphilitic.

There is a condition of the vitreous body, visible with the ophthalmoscope, which points with very great probability to syphilis. It is a cloudiness due to fine dust-like opacities, which may be seen to float about as the eye is moved in different directions. This state of the vitreous is occasioned by a chorio-retinitis, nearly if not quite invariably of specific nature. Gummata in the choroid are sometimes seen. Hutchinson has reported a case in which this was the only sequel of a syphilis whose initial lesion and secondary eruption he had treated many years before.

Ophthalmoplegia interna, paralysis of the constrictor muscle of the iris and of accommodation, should always excite strong suspicions of syphilis, unless some other cause is obvious, such as diphtheria, which, however, does not generally cause the dilated pupil, even when it produces paralysis of accommodation. This form of ocular paralysis, according to a recent writer, generally follows cases of mild, early syphilis, and consequently cases which may easily have been overlooked. I have myself within the last year seen a striking instance of this. Mr. Y., a lawyer of distinction, consulted me as to his right eye; there was mydriasis and loss of accommodative power; on asking whether he had ever had syphilis, he told me that he had; furthermore, that for the primary sore he had consulted a physician, who, after some observation of the case, assured him that he did not have syphilis; accordingly he married soon afterward. His first child presented a disease of the skin which, as it resisted ordinary measures, Dr. Bloom, of this city, was called to treat. He at once recognized its true nature, and on ques-

tioning the father was convinced that he was the subject of syphilis.

Of paralysis of the external muscles of the eye about thirty per cent are syphilitic. There are many other diseases of the eye caused by syphilis, but I have attempted to enumerate only a few of those most important from the standpoint of diagnosis.

LOUISVILLE, KY.

Societies.

LOUISVILLE CLINICAL SOCIETY.

Stated Meeting, December 17, 1889, J. M. Mathews, M. D., President, in the chair.

Dr. Mathews, presenting a patient before the Society for examination, said: This is a very interesting and important case. It has been under my observation a few months only. The patient having been under other physicians not only a few months but for several months—perhaps several years. When he came to me he complained (and still complains) of great pain, situated directly over the sigmoid flexure. This pain comes on at intervals, and I have never yet been able to ascribe it to any especial cause. He travels a great deal in his business; and on the railroad cars. He has been frequently attacked by this severe pain, and the conductor on several occasions has been kind enough to procure medical aid for him in towns through which they passed, the patient getting a hypodermic, which is the universal custom. Prior to these attacks of which he now complains, he suffered, in 1880, an attack of excruciating pain, and, calling a physician, he was informed by him that he was evidently passing a renal calculus. He gives a vague history so far as constitutional disturbance is concerned. He does not believe himself that he has ever had syphilis, although he does admit to having had an abrasion or a sore; he claims to never have had any secondary eruption.

These attacks of pain he describes as nearly unbearable; formerly at night he was awakened by this terrific pain, and he then relied on opium for relief. The pain lasts from a few minutes to several hours in

duration, but it never changes its location ; it is always in the same spot, which, as I have said, is very near the flexure.

There has never been any discharge of pus, mucus or blood, except perhaps a little staining of the feces from capillary piles or something of that nature. Discharge has not been a factor in his case.

He has had many physicians and much advice, without profit to him. Recently, while he was off on a short trip, he sent back to me a specimen here presented he had passed in the course of these attacks from his bladder ; some months after he passed another, which I also present for your examination. I confess I can not see any connection between the causes of these attacks of pain and those which bring a discharge like this from the urethra.

Some months ago I had this patient to go with me to Dr. Ouchterlony, who concurred in my opinion, viz., that the disease was in the sigmoid flexure.

His operations he reports as being normal in amount, form, consistence, and indeed in all that characterizes a healthy evacuation of the bowels. He has been constipated at times rather than suffering from diarrhea, and at such times has resorted to the aperients in common use.

This to me, gentlemen, appears to be a serious trouble. This man has thought frequently he would die from the intensity of the pain. He has now been through a variety of hands, with a corresponding variety of treatments, without benefit, and I therefore present him this evening. Believing that syphilis might have played an important rôle in his case, I have had him take large doses of iodide of potassium. He has rather an idiosyncrasy against the drug. It affects him quickly, but makes no permanent impression on the disease.

Dr. Ouchterlony suggested that he take codeia to control the paroxysms of pain, and since he has taken it two or three times in the twenty-four hours, without immunity, however, from the pain.

With this short description I submit the patient for your examination.

I have asked this man often with reference to the frequency of micturition. The urine seems to be normal both as to quantity and frequency, and also as to quality, it having been so reported on several occasions by the chemists.

Is there any induration in the sigmoid flexure region ? I have sometimes thought I could detect it, but pressure does not elicit pain or disturbance. On the contrary it seems to give him relief sometimes.

There is no such thing as prejudicing the opinion of intelligent physicians. I have acted on the suggestion that he was a syphilitic subject, and that at the sigmoid flexure there is a thickened, even indurated, yet not ulcerated condition.

This man is willing to have even colotomy done for the sake of gaining relief. Exception was once taken to a paper read by myself upon syphilis affecting the rectum, but the longer I live, and especially the longer I observe these cases, the more I am persuaded it is a frequent occurrence. Syphilitic affection of the rectum itself I have observed as secondary, without syphilis manifesting itself in any other portion of the body ; but the patient does give a history of intestinal disturbance, which, I judge, was syphilitic, but that seems to have cleared up. The question is, if this be syphilitic, and of six years' duration, why is it that at this stage there is not some discharge of mucus, pus or blood, indicative of ulcerative process ? That would be the condition I should expect to arise in other portions of the body where the mucous membranes were affected to a corresponding degree.

This man says he has natural evacuations. If this diagnosis be correct, what connection have these specimens that have passed from his bladder with it ? He has no inflammatory condition of the bladder or urethra ; he can hold his water as long as most other men without discomfort.

Dr. J. A. Ouchterlony said : I find, in rolling the sigmoid flexure under the finger, that it is more voluminous and offers greater resistance than the empty gut does in a state of health. I do not remember that there was

any marked tenderness; there is certainly no tenderness this evening. But while direct pressure fails to elicit pain, slight pressure, passing the gut from side to side under the finger, discloses the condition of things I have just mentioned. One or two points, however, merit greater attention than they have yet received. One relates to the condition of the rectum, whether habitually empty or habitually full. The other point relates to the passage of a bougie. (Dr. Mathews answered, the rectum is habitually empty, and that he had passed a bougie up as far as the splenic flexure.)

These facts taken together are sufficient in my estimation to establish the diagnosis of obstruction. I have seen cases where there was undoubtedly organic disease of the bowel in this locality, and where yet a bougie could be passed. That, of course, depends upon the degree of obstruction. The bowel may be considerably narrower than normal, and yet easily admit a moderately large bougie.

As to the nature of the enlargement I feel, first, that the appearance of the man's nose is so highly suggestive of syphilis that I could not divest myself of the belief that he is a syphilitic. He gives no history of having received a blow or any other injury, and I don't know of any other disease that would give rise to such a condition. It is too remote to regard it a congenital deformity. The long duration of the disease is strongly in favor of the non-malignant nature of the case, and increases in that way the probability of its syphilitic origin.

Dr. Satterwhite said: The case is one involved in considerable obscurity, but my impression is that the cause of the trouble is syphilis. The fact that the case is ill-defined in secondary manifestations, and that the patient denies having had syphilis, cuts no figure in arriving at the nature of the case. Several of the gentlemen present will remember the case of a young girl, in the surgical ward of the City Hospital, who had an obscure bowel trouble, and who had no syphilitic history whatever. *Post-mortem* showed ulceration and induration of the bowel. Here

there is no induration to be detected sufficient to suggest malignancy, and if it is not syphilis I do not see what it can be.

Dr. John G. Cecil said: I think I would consider the patient a syphilitic subject. His nose is a sermon on syphilis in itself. No other disease except syphilis, outside of traumatism and congenital deformity, produces the characteristic shape of this nose. It is not an infrequent thing to meet patients who have syphilis, and who never have exhibited any distinct secondary symptoms. One particular point is masked more or less by the anodyne, and thus we are robbed of one of the best symptoms in being unable to note the peculiarities of the pain.

Dr. Geo. W. Griffiths regarded the prognosis as serious, and its seriousness enhanced by the fact that the patient so calmly contemplated so serious an operation as colotomy. Such a state of mind is indicative of the grave character of the man's trouble.

Dr. W. Cheatham said: I never saw such a condition of the nose except as the result of syphilis. The patient must have had serious disease to leave such a deformity. The fact of his having recovered from catarrh under treatment is highly suggestive.

Dr. I. N. Bloom said: We have here an intelligent man, forty-eight years old, who many years ago had an abrasion, and presents now a peculiar condition of the nose, which may be the result of syphilis. There are no other symptoms that can be regarded as syphilitic that can be elicited. This man is attacked by paroxysmal pain in one region; the attacks occur irregularly, lasting sometimes a few minutes, sometimes hours, sometimes days. The combination of a sore on the penis and the condition of the nose warrant the diagnosis. But is the diagnosis confirmed by subsequent history? Probably he has been through the hands of many physicians who would reach the same conclusion and subject him to antisyphilitic measures. Indeed there is evidence that he has been through various kinds and degrees of syphilitic treatment. He has been taking twenty grains of iodide of potash three times a day

without benefit. Admitting it to be a syphilitic involvement, other results than failure from such treatment are to be expected. The consultant has found thickening of the walls of the intestines. I confess I could not. Again, I fail to see, admitting he has had syphilis, how the slightest connection has been established between his symptoms and syphilitic disease. At any rate I would take advantage of the doubt and put the man through a vigorous mixed treatment, and if I failed with that I would give up the diagnosis of syphilis.

Dr. H. A. Cottell said: I know I can add but little to what has already been said in reference to this very interesting and at the same time very obscure case. I should be inclined to concur in the opinion of most of the speakers who have adopted the hypothesis of syphilis. Excluding trauma and congenital deformity, as explaining the condition of the nose; a point is made in favor of syphilis. This is strengthened by any narrowing or stricture of the bowel in any part of its course. But I wish to speak especially of the specimens Dr. Mathews has presented. They might lead to a suspicion of syphilis in themselves. I have seen, from the bowel of old syphilitics, exfoliated masses which showed organization, epithelial cells, and embryonic elements. One of these would seem to be a mass of fibrine; the other is mucous or perhaps pus passed in the presence of an alkaline urine. But what association can this have with the condition of the bowel described? But one that I can see, and that is, that in narrowing of the sigmoid flexure the accumulation of fecal matter which may have taken place above has impinged upon the kidney pelvis, and by pressure has set up inflammation.

It seems strange that the patient has passed such specimens with the urine, and still no pus has been found. Still, he might have trouble in the kidney pelvis not manifest in all specimens of the urine. I have noticed cases of that kind; one I now call to mind, a woman who has pyelo-nephritis.

The diagnosis from the clinical history and the derivatives in the urine is quite clear. At one examination the urine will present tube casts and albumen, at another they are absent. If such a condition exists here, the case could be cleared up only by an examination of the urine week after week for a considerable period.

Dr. Cecil, continuing his remarks, said: It would appear, from the remarks that have preceded, that a diagnosis would be best, and most accurately reached in this case by exclusion, and I think almost every possible cause has in this discussion been excluded, except that which is generally concurred in. Dr. Mathews says he can not understand why narrowing of the gut is not attended by pus, blood, or mucus in the discharges. Is it not possible that this man may have had ulceration, attended by such discharges at one time, and under the influence of anti-syphilitic treatment recovered to such extent that he now has cicatricial contraction? The paroxysms of pain in his case could be explained by the ordinary motions of the bowels. The contents of the bowel moving down till opposed by the stricture would suddenly cause spasm of the bowel or sudden beginning of pain, which under the influence of an anodyne would gradually pass away at a variable length of time. In regard to the history of syphilis, the fact that he has had no secondary symptoms I should regard as of no value whatever. I should proceed to the thorough saturation of this man with the mixed treatment, for I believe there are many cases of this kind that do not get the good effect from either the mercury or the iodide alone that they do get from the two combined.

Dr. Bloom asked that neuralgia be not overlooked in the consideration of the pain.

Dr. Satterwhite, resuming, said: This case is the more interesting as adding one to that class in which the ordinary phenomena of syphilis, after the occurrence of the initial sore, is far from regular. It calls to my mind the case of a young railroad clerk in this city, who, after having the initial sore, passed over the secondary symptoms en-

tirely, to be later affected by severe pain in the head. He was finally confined to his bed, and was regarded as fast approaching imbecility, if not death. He was placed on large doses of iodide of potash, $\frac{3}{4}$ ss a day, and recovered. He is now a useful member of society.

Dr. Ouchterlony said: There are two points in the case that especially interest me, viz., the subjective and the objective symptoms. The first is of course the pain. We know very well that neuralgia, due to a permanent condition, is not necessarily a permanent pain. An organic disease of the nerves is attended often enough by neuralgia that is paroxysmal, yet the morbid state is there all the time. Some of the worst forms, due to injury of the nerves, as in those cases about the wrist where the nerves have been partially cut across by pieces of glass or other means of violence, are attended by most violent paroxysms. Another instance is the inclosure in the stump of an amputated limb of nerve fibers in a mass of cicatricial tissue giving rise to violent paroxysms of pain in the nerves. So we can very well understand, it seems to me, that there may be a permanent morbid condition of the parts, and yet only paroxysmal attacks of pain in consequence. Then, again, the man is now practically an opium-eater, and we know very well that when the effect of the dose wears off the patient suffers all sorts of uncomfortable sensations, so it is difficult to say how much of the pain is due to the disease and how much to the wretchedness consequent to the cessation of the effect of the drug.

Secondly: In cases of disease of the sigmoid flexure the induration or neoplasm sometimes disappears; it may not be felt at all and yet be there. This is a very movable part of the intestine, and the Fellows examining this man may not have discovered what certainly exists there, viz., an increase in volume and resistance at that point; even while conducting the examination I have noticed this to slip away.

We can not well overestimate the importance of the fact that the bowel is always

empty. If that does not indicate that there is an obstruction somewhere above, what can it mean? I would like to ask the opinion of the gentlemen present as to the likelihood of malignancy, and whether malignant degeneration ever takes place in syphilitic neoplasms, and with what frequency?

Dr. Mathews, concluding, said: I heard a distinguished English surgeon say once that he had much rather meet with a case of cancer than syphilitic ulceration of the rectum. I asked him his reason for the declaration, when he replied: "In cancer the victims die early; syphilitic ulceration is never curable, and the unfortunate subject of it may go on through a comparatively long life in great distress."

Fourteen years in the special practice has taught me that syphilitic stricture of the rectum is never curable. I have studied such cases for months, and treated cases for periods of a year or more, and I have never yet seen the least diminution whatsoever in the syphilitic deposit in the gut. If this be true of the rectum, the same applies with equal force to the sigmoid flexure. The process of involvement is the same; beginning as a neoplasm, contraction occurs in the course of time, and stricture results.

I see no reason to think that because a man suffers from syphilis he can not suffer from neuralgia also. Finally, the question just comes down to this—what shall we do to relieve the man? Shall we abandon a man to his fate at forty-six and admit we can do him no good? It seems to be settled that antisymphilitic treatment will avail nothing, and I could almost think with Dr. Bloom that the trouble might be otherwise than syphilitic.

Dr. Bloom referred to a case of carcinoma following syphilitic deposit, reported about two years ago. (Reported stenographically by H. A. Keleh, M. D.)

ONE-HALF-PER-CENT solutions of creolin are becoming popular for vaginal injections, for washing out the bladder, and as injections in dysentery.

LOUISVILLE SURGICAL SOCIETY.

Stated Meeting, December 5, 1889, Vice-President J. M. Mathews, M. D., in the chair.

Dr. W. O. Roberts reported a case of compound fracture of both thighs, occurring on the 3d of June last. The wounds were washed and drainage was provided for; sufficient padding and plaster were put on over an absorbent dressing. No tube was used. One washing with a 1-2,000 bichloride solution salivated the patient. The plaster was left on nearly seven weeks. On removal of dressing I found some motion in left limb; the condyle having been split, motion in the knee was limited. There was fine motion in right limb.

Dr. Ap Morgan Vance said the objection of patients to amputation and antiseptic surgery have saved of late many a limb. He thinks that electricity and massage will restore the function of the limbs in such cases.

Dr. Turner Anderson showed a urethral calculus from a boy two years old. There were no symptoms of vesical calculus. He first saw the child in his father's arms, and suffering great pain. The most urgent symptom was inability to urinate. Palpation revealed a calculus just back of the head of the penis. The doctor dilated the prepuce, and then the orifice of the urethra, under chloroform, and removed the calculus. The bladder was much distended. After coming out from chloroform the boy got an enema of warm water. Bowels and bladder were freely evacuated.

Dr. Vance had seen one similar case.

Dr. Grant had seen two. In one the patient was nine years old; under chloroform the stone was removed with forceps. Most writers say that urethral calculi occur very infrequently. Dr. Grant thinks they are formed in the bladder, and their infrequency is due to their being washed out by urine.

Dr. Roberts saw a case of calculus in a negro child who had not passed urine in twelve hours. A catheter found obstruction far back in the urethra. By means of a metal catheter he felt the stone and pushed it back. The child urinated at once. He came to clinic next day to be cut for stone, but

the stone could not be found. The speaker has operated several times in similar cases in children. Once he had to split the urethra.

The essay of the evening was read by Dr. H. H. Grant; subject, Resection of the Hip-joint for Tuberculous Coxitis. (See p. 65.)

DISCUSSION.

Dr. Roberts said: The question of resection had been sufficiently discussed. In the stage of abscess he favors it, and where there is disease of the bone and cartilages. In such cases, if neglected, the disease will go to an extent necessitating amputation. When the deposit is in the lungs no good will come from the operation.

Dr. Vance said: Resection has gained favor as antiseptic measures have improved. He favors operative procedure where suppuration has occurred, and where there is diseased bone present, but by early expectant treatment many cases may be cured. The speaker once resected in a case and got restoration of the bone; the periosteum was good, but the whole femur was tuberculous. Whitehead alone advocates forcible movement of tuberculous joints. It opens up fresh absorbent surfaces and incites general trouble.

Dr. John G. Cecil thinks that manipulation is specially objectionable. No treatment is as good as excision when the disease is not extensive. He has seen curetting and scraping do good when the disease was extensive.

Dr. Grant, closing discussion, said: Operation by removing source of possible general infection is desirable. Irrigation and cleanliness are paramount. Some authorities say disturbance of the local disease favors general infection. Cases constitutionally affected improve rapidly after operation. Phelps says that diathesis is not present as a rule. The disease in most cases is a purely local tuberculosis. Better open and remove the diseased bone than to attempt by irrigation and scraping to cure.

Dr. Vance reported a case of gunshot wound of the belly; wound one inch and a quarter below to the left of the umbilicus.

Laparotomy four hours after shot; four large wounds of ileum were found; temperature 99°, pulse 90, and full. Patient began to sink in twenty-four hours. He died forty-four hours after operation, pulseless. He died of hemorrhage into the bowels from an overlooked vessel. He vomited considerable blood. The Lembert continuous suture was used. Nice apposition of parts was secured. But for the failure to find the one vessel the speaker believes the case would have been successful. Dr. Vance had resected the gut in dogs with perfect success.

Dr. Cetyl said that the getting at these wounds generally required large openings. If we can keep the gut inside a small opening and yet be sure we have all points of injury exposed, results would be better. He thinks Dr. Vance should have made Senn's test, a dependence on washing not being enough.

Dr. Vance: After forty-eight hours, if any wound be left, we would have had distension and peritonitis.

Dr. Roberts advocates a free opening so as to examine all viscera. The wound should be low enough to drain well. He once had a case which died in four days in delirium tremens. The *post-mortem* showed dark blood in the pelvis. The tubes won't do for drainage.

Dr. Vance agrees about size of opening. His cut was below the umbilicus. There was no blood in the urine; the wound was too low to involve the kidney. The abdomen was tight. On opening it the guts crowded out; it took rough handling to get them back. Finding all wounds close together, he felt his man had the better chance to get well by not making a larger incision.

Dr. W. L. Rodman reported the case of a peddler who had been cut ear to ear, and stabbed twice in the abdomen. He saw the patient seven hours after the accident. He got hydrogen gas; made Senn's test; was able to light ten or twelve matches. He resected the omentum that protruded, closed the intestinal wounds, and sent the man to the ward. He is now doing well. The man in addition to the wounding was badly burned,

which accounted for a considerable temperature rise. No adverse abdominal symptoms developed. He is hungry all the time. Dr. Rodman is much pleased with Senn's test. He got the gas in twenty minutes after he ordered it. In order to get at the intestinal wound he pushed the omentum out of the way with the forceps. Next time he will put a tube into the wound.

Abstracts and Selections.

THE TREATMENT OF APPENDICITIS BY EARLY LAPAROTOMY.—Dr. Senn, of Milwaukee, in a paper published in the Journal of the American Medical Association, November 2, 1889, and Dr. McBurney, of New York, in a paper read before the New York Surgical Society November 13, 1889, make contributions to the subject of the successful treatment of appendicitis which indicate that the advance in the management of affections of the appendix, proposed by Treves in the early part of the present year (*Lancet*, February 9, 1889), has taken a permanent place in surgical endeavor, with much promise of advantage in future attempts to control this so often fatal affection. Both surgeons call attention to the fact that the primary and essential condition present in the cases of so-called typhlitis, perityphlitis, or paratyphlitis is an affection of the vermiform appendix, inflammatory or ulcerative, with tendency to perforation or gangrene. Dr. McBurney would elide from the medical vocabulary these hitherto commonly used terms, and would substitute for them simply the term appendicitis, as more correct pathologically and less likely to obscure the indications for treatment. He clearly states the dictum that all this class of cases are intra-peritoneal in their origin and throughout their course, and urges an early resort to ablation of the diseased appendix as a comparatively safe method of preventing the development of more redoubtable symptoms. Dr. Senn calls attention to the fact that in many cases the development of so-called perityphlitis is preceded by a well marked complexus of symptoms pointing directly to the existence of appendicitis. Repeatedly recurring attacks of pain, tenderness and induration in the region of the appendix, indicative of the presence of chronic disease thereof with occasional exacerbations, are especially to be regarded as warnings of impending danger.

If the condition is recognized before dangerous complications have developed from perforation and general septic infection, he also recommends extirpation of the appendix, assuming that it can be done at this early date with comparative ease and almost perfect safety. Dr. Senn recites two cases in which this practice has been resorted to, once by himself and once by Dr. Hoegh, of Minneapolis, at his suggestion. In both cases there was a history of repeated previous attacks of the local symptoms recognized as indicating the presence of appendicitis. In both the appendix was removed with facility, and uninterrupted recovery was secured. In both the mucous lining of the organ was deeply ulcerated. Dr. McBurney relates eight cases in which he has done laparotomy and excision of the appendix upon patients who presented well-marked symptoms of appendicitis, prior to any development of symptoms of perforation. All recovered without unfavorable symptom except one who died. The latter case was one in which the appendix was buried in a mass of inflammatory exudate demanding for its complete removal an amount of violence, exposure, and handling of the parts that provoked the fatal result. The author in another such case would be content to leave the organ *in situ* after making provision for drainage.

Chronic appendicitis is characterized by acute exacerbations of short duration, the attacks, of greater or less severity, occurring at intervals of a few months or weeks. Between the attacks the patient may be in perfect health, unless the attacks recur with great frequency, when impairment of the digestive functions produces general ill health. According to Senn, recurring attacks of pain in the region of the appendix with a circumscribed area of tenderness over the same point are presumptive evidences of the existence of appendicitis, and if the other symptoms and signs point in the same direction laparotomy is indicated.

As a matter of course, the strictest asepsis is presupposed in the conduct of the operations recommended. The incision should be directly over the center of the cecum, about four inches long, extending to within one inch of Poupart's ligament. The peritoneal cavity having been opened, a compress should be packed about the cecum, so as to prevent prolapse of the small intestine; in some cases the appendix will come into sight at once, in others it will have to be sought for; the raising of the lower margin of the cecum generally will suffice to

expose it. The mesentery of the appendix is next to be ligated in sections as far as to the cecum; adhesions, if present, are to be separated, and bleeding points tied; finally, the isolated appendix is tied around its base close to the cecum with silk, and the organ cut away about one quarter of an inch below the ligature.

As to the treatment of the stump, Senn recommends first, that it be carefully disinfected, then that it be dusted with iodoform, and finally, that it be sht in by drawing the adjacent serous surfaces of the cecum over it and securing them with a number of Lembert's sutures. Drainage in these cases is unnecessary.

In corroboration of these views of Treves and Senn, Baldy, of Philadelphia, has recently published (Medical News, November 23, 1889) an account of three cases in which, having done laparotomy for diseases of the uterine appendages, he found also the appendix so diseased as to call for its excision. In each case good recovery ensued with subsequent good health.

Notwithstanding these cases of Senn and McBurney, the indisputable soundness of their pathology and the brilliant success of their own efforts, it ought not to be forgotten, nor will it be when the final judgment of the profession is made up, that by far the greater portion of cases of acute appendicitis, those which have been hitherto classed as typhlitis or perityphlitis, recover spontaneously and permanently without suppuration, at least without intra-peritoneal suppuration. The cases classed by Senn as chronic appendicitis form a group by themselves; spontaneous and permanent recovery, however, from this condition is also not infrequent. A very grave responsibility, therefore, must attach to the surgeon in any given case in deciding upon laparotomy and excision of the appendix. It is evident that at present, at least, it could only be proper for one who was a perfect master of aseptic abdominal technique to offer such a procedure as less dangerous than the policy of delay and palliation. It is doubtless true that if, in all cases in which there were present symptoms pointing to trouble with the appendix, the abdomen should be opened immediately and the appendix excised; the occurrence of immediate perforation would be anticipated in some cases, the production of general peritonitis would be prevented, and lives would be saved; on the other hand, many would be subjected to the hazards of laparotomy and excision in which there was no danger of perfora-

tion, and which would have recovered spontaneously if let alone. The general principles that govern surgeons with reference to all operative work must, however, be applied here, and in any given case the probabilities of every kind must be given due weight in coming to a conclusion. Surgeons may still hesitate and defer operative attack in cases of appendicitis until well defined evidences of suppuration are obtainable, and their course can not be said to be otherwise than prudent; surgeons may boldly expose the appendix and remove it upon the first symptoms of inflammation declaring themselves, and as long as their results are as favorable as those of Senn and McBurney their course must be considered justifiable. The next few years will doubtless accumulate an abundant experience in this new path upon which more safe conclusions for general guidance may be based than can be upon the very limited experience as yet available. *L. S. Pilcher, Annals of Surgery.*

THE ASEPTIC APPLIANCES AT THE HOTEL DIEU IN LYONS.—In an elaborate article, Professor Poneet, of Lyons, France, describes what he has been able to accomplish in the construction of a new operating theater at the Hotel Dieu, of that city. In planning the building, he aimed to meet all the demands of modern surgery to the highest possible degree. To inform himself fully, he visited the clinics of other countries, principally Germany, Switzerland, and America. He aimed at the suppression of dangers to which all wounds are exposed—infection by the air and infection by contact. This double result was secured by the general disposition of the room, by its arrangement, and by the rigorous adoption of every thing which would assure asepsis and antiseptis.

Quadrangular in form, the theater measures about twenty-eight feet in length by nineteen feet in width. Its extreme height is about twenty-two feet. A single window, thirteen feet high by seven feet wide, allows an abundance of light to enter both from above and laterally. This window opens to the east and consists of eight large panes held in a metallic frame which presents the minimum of breadth to interfere with the light.

The ventilation of the room is secured mainly by means of this window, which looks out on the Rhone, and is always kept open except at the time of operating, as is also a double glass panel, forming the upper part of a large door at the opposite end of the room. Artificial light ample for all purposes is obtained, when needed, from a Wenham

lamp of great power hanging from the center of the dome-like ceiling; a small burner is also placed over each of the wash-basins in two corners.

The walls, to the height of nearly five feet, are lined with a large sheet of glass, closely joined together. These sheets are nearly an inch thick, and present no elevation or depression, but form a continuous surface, polished like a mirror. Their inner face has been painted a rich brick red with a broad band of a deeper red as a border. This color not only renders the glass more pleasing to the eye, but also renders every soiled spot the more readily recognizable. Above this, the walls are covered with a smooth plaster of a rose-gray tint.

On the right of the entrance is placed a plate of milk white opaque glass, which is used for a table for demonstrating specimens. Five glass plates, from a quarter to a third of an inch in thickness, are placed about six and a half feet from the floor on nickel plated brackets firmly fixed in the wall. They are separated from the wall in their entire length by an interval of two inches, which not only makes them easier to clean, but obviates the accumulation of dust in the inter spaces. Upon them rest large bottles containing the antiseptic solutions, and metal cases in which the antiseptic dressings are kept. The supports are of iron, nickel-plated, and very easily kept in order. Near the bottom of each receptacle for antiseptic solutions is an orifice, in which is placed a branching tube, to the projections of which the rubber irrigation tubes are attached. On the outside, in very distinct red letters, are inserted the names of the contents of the receptacles.

The theater is connected with the hospital by a pair of nickel-plated iron doors. They not only keep out external noises, but they also fulfill the same aseptic indications as the glass slabs. They are not subject to alterations like those of wood, and always present a brilliant polish. M. Poneet asks if this polish is not the prelude of asepsis, and remarks that his four months' experience convinces him that his opinion was correct. The luxurious appointments and the careful regard for asepsis have made a profound impression upon his attendants, and, in consequence, the room, after four months' use, is in identically the same state as when the first operation was performed in it.

The floor is composed of Vicat cement, which was considered preferable to the Mosaic employed so much in other countries, because it is cheaper, less slippery, and of very great endurance. Grayish white in color, it presents

numerous points which prevent slipping. At the sides of the room this floor meets the glass slabs of the wall in a curve. The floor has a fall toward the center of about one and a half inches. From the four blunt angles of the room proceed four trenches toward the center, terminating in a central opening closed by a bronzed iron grating. These principal trenches receive a number of accessory trenches, which makes the flow of liquids easy. They then pass into a conduit under the floor, the care and cleansing of which is made very easy by certain openings usually closed by metal plates; these openings are near together and situated in the course of the conduit to a considerable depth. A trap placed at one point in this pipe insures disinfection and prevents regurgitative emanations from the sewer. This disinfection is further insured by the free flow of fluids from the wash-bowls which pass in the same way.

The floor is kept aseptic by daily cleansing with water and brush after the operations, and by weekly washing with five-per-cent carbolic solution.

A large marble grate, without moldings or other decorations, serves for a coke fire of sufficient power to maintain in the coldest weather a temperature of 65° to 68° F. The various gas-heaters for warming water, sterilizing, dressing, etc., also add to the temperature. M. Poncet thinks that an opening room where patients are sometimes exposed completely and for a considerable period at a time is never too hot. It is important, however, that the surgeon and his assistants should be able to work without inconvenience, so he considers a temperature of 65° to 68° F. sufficient; but for more prolonged operations he always takes the precaution of covering his patient with rubber sheeting, leaving only the field of operation exposed, and surely preventing chilling.

The furniture of the room is very simple. Glass and iron, nickel-plated or bronzed, are here again the only materials used. Two fixed glass tubes of different dimensions stand at an inch and one half from the wall, the interspace preventing the accumulation of debris. They hold hand-basins, glass cases containing reels of ligatures, bottles for drains, etc. Another table is covered with various substances—ether, iodoform, tincture of iodine, etc.—of daily employment; before it stands, at an operation, the sister charged with handing the various solutions and preparing the dressings. The glass tops of these tables are an inch thick, and they rest upon cylindrical metal legs; the same brick red color seen upon the walls is repeated here. Other tables have two shelves, and are used for instruments, dressings, cushions, etc., during the operation.

There are but few chairs, and they are made of bronzed iron, as also are the stools. One of the chairs is especially designed for the seat of the patient during operations upon the face or head which do not require anesthesia.

The majority of operations naturally are performed upon an operating table. This too is original in conception. In its construction four considerations were sought to be satisfied:

1. Asepsis, easy to obtain and maintain.
2. Such an arrangement that the blood and other fluids might flow away rapidly without soiling the surgeon, his assistants, or the patient.
3. Great simplicity in the disposition of its various parts and the suppression of every kind of mechanism.
4. Perfect solidity and stability without excluding great mobility.

The table, which measures seventy eight inches in length by twenty-six inches in width, stands thirty-six inches from the floor, and consists exclusively of glass and nickel-plated iron. It is composed of four triangular plates of glass inclining to a common center by a declivity of an inch and a quarter. They converge at their apices to a central opening one inch in diameter, in which is fixed a metal ring through which fluids may pass into a rubber tube to the floor. It is supported by four legs, connected for the sake of stability by cross-bars. It moves freely upon large casters, and in spite of its 280 pounds weight a single person can move it with ease. There are no arrangements for varying its elevation; if a change in the attitude of the patient is desired, it is accomplished at will with the use of rubber cushions of various sizes. At the head of the table, where stands the assistant deputed to administer the anesthetic, swings a basin large enough to contain every thing needed for anesthesia, ether, chloroform, forceps for pulling out the tongue, etc. Closed, it disappears under the table, but a very slight traction places directly under the hands of the anesthetist all the objects which he may need. The table is also measured off into centimeters in its entire length, so that measurements may rapidly be taken. On either side are slots for the reception of movable brackets, which can be attached or detached at will. They hold plates of glass on which, in course of an operation, the instruments, small cushions, etc., may be placed. The least spot, the slightest soiled point is readily apparent on the glass and nickel.

During an operation a mattress three inches thick is placed on the table, agreeing exactly with the dimensions of the table. This mattress is composed of hair, covered with rubber. It is pierced through by various openings for the flow of liquids.

A railing of bronzed iron fastened to the floor, composed of three parts capable of being readily and firmly fastened together, is placed about the table during operations. It has the form of a horse-shoe, and provides a free space next to the table in which the surgeon and his assistants may move with ease, while spectators are prevented from approaching too near.

Another operating table is provided for those cases in which the surgeon wishes to work between the patient's thighs. It is also of glass with a nickel-plated frame-work, and measures forty-eight inches wide. At its upper extremity is a receptacle for the anesthetist's tools, as in the other table. On its two lower legs are placed two metallic rods with foot rests; the level of the rods may be raised or lowered as desired, and they may be swung around laterally to any desired position or slipped entirely around under the table.

In connection with the rubber cushions he uses exclusively for varying the attitude of the patient, Mr. Poncet remarks that they offer among other advantages that of ready asepsis; the rubber sheeting can be readily scrubbed and washed without inconvenience and without alteration with various antiseptic solutions generally employed. He also takes the precaution before using them to cover them with a compress of sterilized gauze which has been wrung out in a 1-1,000 sublimate solution.

For transporting the patient, he uses a rolling bed made after the plan of Socin.

Mr. Poncet usually uses basins of his own devising which have the advantage of adapting themselves to the figure. A large cylindrical zinc receptacle thirty inches in diameter receives the soiled dressings. A dressing is thrown into the receptacle as soon as it is removed, to be burned a few moments later. The bottom of this apparatus is pierced with holes the size of a two-franc piece, which renders its cleansing very easy. Every day, after an operation, this toilet is made with great care.

There are in this operation hall therefore no corners and no placards in which dust may collect. The walls, the shelves, the tables, the utensils of all kinds are absolutely smooth, without any kind of decoration. The substances composing them, glass and metal, being washed daily, seem to furnish the very best conditions for obviating infection by air. This apparent superfluity, this search for details has been imposed upon the operators by the numerous causes of surgical poisoning to which patients are exposed in a great hospital service, where the activity is considerable, and where in the same locality are both infected and non-infected wounds.

While, however, he fears infection by air, he takes more particular precautions against infection by contact. These are considered in three different classes:

1. The hands of the surgeon and his assistants.

2. The instruments.

3. The sponges, tampons, and dressings.

In addition the patient himself may be considered when the region operated upon has not been disinfected with care, or at any time by accident the field of operation has been brought into contact with bedding or soiled clothing.

For asepsis of the hands he provides a dresser with three large basins set into a plate of glass similar to those of which the tables are formed. One of these basins, provided with a single glass faucet, is reserved for washing the hands with 1-1,000 sublimate solution. This solution is contained in a large glass bottle holding fifty liters, which is placed directly above the dresser, from which the anti-septic solution runs as desired by a rubber tube into the subjacent basin. Cold water, hot water, and boiling water are also furnished in abundance as desired by four faucets. The hot water and boiling water are obtained from a large receptacle of 100 liters capacity.

In order to obtain entire asepsis, all solutions are prepared with boiled water. The soap and the nail-brushes are placed upon little grates in small galvanized pans. For disinfection of the hands he requires repeated washings with hot soap and water, immersion for several seconds in alcohol, 90°, and finally prolonged bathing with 1-1,000 sublimate solution. The surgeon and every person who comes in contact with the patient must of course be clothed with a gown absolutely clean and absolutely aseptic. He uses for himself a gown with the sleeves ending above the elbow, which makes it necessary to disinfect his entire fore-arm.

He is careful to avoid keeping his instruments in the old padded cases; indeed, he possesses but two cases, an amputation case and a resection case. The case in this instance is nickel plated, and the instruments lie in the metal racks.

All instruments are provided with a smooth metal handle, without even the maker's name, as plain as possible, either plated with nickel or with German silver. Instruments employed on the living are not allowed to be used for partial necrosis—sawing of bone, incision of tumors, and the like. He has, moreover, two receptacles of zinc, labeled *Pieces Anatomique*, designed to receive immediately upon their ablation all human *debris*. One of them will

accommodate an entire extremity; the other is reserved for tumors and pathological specimens of small size.

Some hours before operating the instruments are all sterilized by heat in a sterilizer which M. Poncet describes very minutely. He claims to have had the best of results from this instrument and recommends it unreservedly.

This paper then enters with the greatest detail into a description of all the antiseptic materials, solutions, tubes, and other drains, and closes with a reference to the application of some of these points in individual classes of operations.

By this organization he claims to be sure of the absolute disinfection of all objects, of all substances which can be at a given moment in contact with the wounded. It may be thought that he is overcareful. This he considers an error, because it is not possible to take sufficiently into account all the numerous causes of infection in the midst of which operations are performed. This very minuteness avoids all the multitude of conditions which have been so great a source of mortality hitherto. He would even go further, and calls for the immediate erection of a second operating theater for suppurating cases and for those affected with phlegmons, erysipelas, etc. A goitre, for example, can never be removed, a large joint can never be laid open, without fear, upon the same table and in the same room where a diffused phlegmon had been incised or a gangrenous limb amputated.—*James E. Pilcher, Ibid.*

ANAPHRODISIAL EFFECTS FROM COCAINE.—(By C. W. Richardson, M. D., Philadelphia). The author reports a case of a married lady of large physique, modest and reserved, from whom he proposed to remove a growth from the nasal cavity, under cocaine anesthesia. A few minims of a ten-per-cent solution were injected beneath the growth. This was followed by the most remarkable and decided manifestations of erotic excitement, with both facial and verbal expressions that left no doubt in the mind of the medical attendant, as well as in that of the lady companion of the patient, as to the character of the impulses which actuated them. It required some time to bring her to even a moderate degree of quietness. An attempt to perform the operation the following day, using the cocaine very sparingly, led to a similar condition, though not to such an extreme degree. No other unpleasant symptoms occurred upon either occasion.

Surgeons are warned of the development of this train of symptoms, not only by the report of this case, but by the published observations

of Sandré, of Vienna, Cunningham, of England, and others. The author calls particular attention to the medico-legal aspect of the subject, and strongly advises that the presence of a female friend of the patient be present in addition to the operating surgeon and his assistants, whenever it is proposed to operate upon a woman under cocaine anesthesia. *Journal American Medical Association.*

ON LIGATURE OF THE COMMON ILIAC ARTERY FOR THE PREVENTION OF HEMORRHAGE DURING HIP-JOINT AMPUTATIONS.—(By Dr. Poppert, Giessen.) The author reports a case at the Giessen clinic in which Professor Bose had resorted to preliminary ligature of the common iliac artery as the first step in a hip-joint amputation. The patient, a strong, healthy man, aged forty years, had noticed for six months that his thigh had begun to swell above the knee, and that the past few weeks the swelling had increased rapidly and caused pain.

Examination showed a tumor extending from the condyles to the groin, its upper limit being felt anteriorly under Poupart's ligament, and posteriorly a little below the gluteal fold. The limb is cylindrical in shape and measures in its greatest circumference seventy-two centimeters. Skin over tumor is tense and shiny. Veins much dilated. No fracture of the femur. December 11, 1884, Prof. Bose undertook the amputation at the hip-joint.

First he proceeded to tie the common iliac artery in the usual manner. The artery and its vein were easily exposed, and seen to be surrounded by fat and enlarged lymphatics. The artery and the external iliac vein were both ligated and the enlarged lymphatics removed. The wound was then closed by deep and superficial sutures, a drainage-tube being inserted at its lowest angle.

For the amputation at the hip-joint an anterior flap was made consisting only of skin and fascia. The posterior flap consisted of skin and muscular tissue, which here was healthy.

On section of the large vessels, only little hemorrhage took place.

The large wound was drained and closed by silk sutures.

The pulse immediately after the operation was good and strong.

The patient made a perfect recovery. Examination of the tumor showed it to be a spindle-celled sarcoma starting from the bone.

At the time of writing, four years after the

operation, the patient is perfectly healthy and free from any return of the disease. *Deutsche Med. Wochenschrift, Annals of Surgery.*

THE TREATMENT OF PLACENTA PREVIA.—In the Obstetric Section of the annual meeting of the British Medical Association, in August, 1889, Braxton Hicks opened an interesting discussion on placenta previa, and pointed out that under the more accurate understanding of this critical class of cases, and the correspondingly improved methods of treatment, the mortality had been reduced within the last thirty years from thirty to about five per cent; results largely due to early interference and general aseptic management. While our space will not allow a full abstract of this paper, one of the author's postulates should be quoted for the benefit of those who still believe in an expectant or temporizing policy: "I think most of us will agree that, when once hemorrhage has declared itself, there is no security for the patient, but that her life is in imminent danger from liability to recurrent bleedings." The natural deduction from this proposition is, "That as soon as we ascertain the case to be one of placenta previa we should make arrangements for terminating the pregnancy at the earliest possible time; that as far as possible we should not leave our patient, certainly not to an indefinite future."

In the treatment of placenta previa it is our first desire to prevent further bleeding, which desideratum can be obtained by pressure, whether by the tampon, by the head being passed down by the uterine efforts or drawn down by the forceps, or by the leg and breech drawn down if presenting, or made to present by turning. With regard to exerting sufficient pressure with the tampon, Hicks ranges himself with those who disbelieve in its use, chiefly from the difficulty of its efficient application, although admitting its efficacy in promoting uterine pains and dilatation of the os. He would advise, therefore, if the os is sufficiently dilated, the rupture of the membranes, and a brief delay to see if awakening pains will drive the presenting head into the os and against the placenta over the seat of hemorrhage. Failing efficient pains he would apply forceps, not with a view to immediate delivery necessarily, but to drawing the head firmly against the source of hemorrhage.

If, on the other hand, the os is insufficiently dilated to admit of forceps, Hicks

would advise the use of dilating bags or the performance of bi-polar version. [In the opinion of many obstetricians in this vicinity, manual dilatation is far superior to any form of hydrostatic bags.] And he especially points out the efficacy of bi manual version, which can be performed when the os will admit only two fingers, since by this means a leg or half breech can be brought down and effectually check hemorrhage by pressure at the seat of bleeding. There is then no need of haste, and extraction can be delayed until the os shall have been dilated by uterine action. Of course, if the placenta is completely previa, it must be detached on one side and the flap of placenta thus detached be brought down and pressed firmly by the presenting part against the lower uterine and cervical wall.

Lomer (Hamburg), who had previously written on this subject, sent a letter to the meeting, in which he stated that of 190 cases treated by bi-polar version only 9 were lost. The rule he recommended was to turn and then wait, relying on the pressure of the leg, thigh, or half breech to prevent hemorrhage, and, should bleeding occur, using slight traction on the leg to more effectually tampon the bleeding parts.

Writing on the value of combined version in these cases in a previous paper, Lomer expresses the belief, based on statistics, that the fetal mortality by the method is no greater than, if as great as, that by other methods of treatment. Moreover, he believes that the fear of many that there is danger of internal concealed hemorrhage after combined version is groundless; in over 200 cases this occurred only once. All cases of placenta previa are not, of course, to be treated by this method, which finds its most valuable application when the os is not sufficiently dilated for forceps or internal podalic version. In reply to the question as to how long one should wait after performing combined version before proceeding to extract, Lomer makes it depend on the presence or absence of uterine contractions; he would prefer to wait until the normal contractions shall have dilated the os; in some cases extraction can be performed in fifteen minutes, in others six hours are allowed to elapse.—*Dr. Charles M. Green, Boston Med. and Surg. Journal.*

ON THE TECHNIQUE OF RESECTION OF THE RECTUM.—(Dr. William Levy, Berlin.) Rectal resection for the removal of high-seated growths has been greatly facilitated by the works of Kocher and J. Kraske (v. An-

nals, 1885, November, pp. 414, 415). Still, in either procedure the coccyx is sacrificed, the pelvic floor is robbed of a considerable part of its support, and the patients often have very annoying after-trouble (incontinence of the sphincter ani, prolapse of the mucous membrane). Heineke's proposition (p. 445) to retain and only temporarily resect the coccyx and lower end of sacrum is, hence, certainly to be considered. Only the method of Heineke is very complicated. Moreover, he carries his incision straight through the pelvic floor, and can only re-establish the natural closure of the anus by a secondary operation. Evidently pelvic floor and sphincter muscle can be best avoided when the incision does not come near them. The only question is whether this is possible, and yet high portions of the rectum be made sufficiently accessible. The case with which this succeeded on the cadaver leads Levy to publish his method without having tried it on the living.

A horizontal eight to ten centimeters long incision, quite down to the sacrum, is made about a finger-breadth above the cornua coccygea. From both ends of this cut he makes a vertical incision, eight centimeters downward, through skin and gluteus maximus. In one of the vertical cuts a hook is placed and drawn forcibly outward. The lateral border of the tuberoso-sacral ligament is laid bare by blunt scraping aside of the gluteal fibers. This ligament with the spinoso-sacral is divided horizontally at the border of the bone. The same is repeated on the other side. Then with an elevator the connective tissue is forced off from the front wall of the sacrum. The blunt end of a rather narrow pair of bone shears is pushed in between elevator and bone and the sacrum cut through. By having the piece of bone attached to the skin flap, to which by far the greater portion of the spinoso- and tuberoso-sacral ligaments are attached, drawn forcibly down by a strong hook, a portion of the rectum will be exposed. After division of superposed connective tissue and, if necessary, the removal of infected glands, the rectum can be exposed downward to within two centimeters of the anus, and upward to the sigmoid flexure. Where the size of the tumor to be removed necessitates it, a portion of the left sacral wing can be easily removed, according to Kraske, without injuring the firmness of the pelvic floor.

The further treatment scarcely needs to be detailed—careful union of the resected gut-ends by a double row of sutures, return

of the displaced flap to its old position, bone, and then skin sutures. The vertical incisions may either be left open and tamponaded with iodoform gauze, or united to a small spot in the upper angle for a drain from the vicinity of the rectum. As the patient lies on the back drainage is favored, either where continuous irrigation is practiced at first, or the wound immediately closed with an antiseptic dressing.—*Cent. bl. f. Chirg., Annals of Surgery.*

MENORRHALGIA AND MENORRHISPASM.—The list of pathological views that have been advanced in accounting for what is usually called dysmenorrhea is somewhat distended, even when the term is restricted to the uterine type of painful menstruation, excluding ovarian and inflammatory pains and true neuralgia. Those most prevalent at the present time, I believe, are, on the one hand, the mechanical theory of obstruction from stenosis or flexion, which may be called the Marion Sims' theory, and the parametritis theory of Schultze. It is not sufficiently well known that this latter observer has completely upset the first or obstructive theory of painful menstruation by demonstrating that a sound may be passed, during the crisis of a supposed example of accumulation, without encountering fluid. Such a view is also weakened by the examples of stenosis and ante-flexion that occur without painful menstruation. Yet Schultze's theory of parametric inflammation as a cause seems to me unsatisfactory. That it has failed of practical acceptance by those even who advocate it, is shown by their adherence to dilatation as a means of cure.

In that excellent picture of painful menstruation contributed by W. Gill Riley to the "American System of Gynecology," another pathological condition is suggested—hyperesthesia of the endometrium. That a hyperesthetic condition of the cavity does not exist in these cases, I think any one who has passed a sound into them will admit. The exclamations of pain when the internal os is passed are most characteristic, and, in cases where a proper gentleness has been observed, must be other than normal; but I do not think that the word hyperesthesia is sufficiently comprehensive as a designation of this condition. Dysmenorrhea, or difficult menstruation, is also but a partial description of the occurrence. In view of these facts I wish to present in brief to this society a new conception of the condition involved in painful menstruation as it has been suggested to me by recent clinical studies, and I also desire to propose a more useful name as a designation of the condition.

Abnormal pain at the menstrual period usually precedes the appearance of the flow, or it may follow a slight show, and be succeeded by a normal flow. As a rule, there is no flow at the moment that the pain is greatest. These facts have been the clinching arguments in the obstruction theory; but do they prove it? The absence of dilatation of the cavity above the point of apparent obstruction is significant. This, coupled with Schultze's observations, is fatal to the theory. The dependence of pain upon spasm, however, is clear, and the absence of flow, or slight flow, during the continuance of the pain only shows that the spasmodic condition of the uterus interferes with the excretory duties of the mucous membrane. Gastralgia during the continuance of nervous dyspepsia and simple intestinal colic are analogous conditions. If I am right in this matter, the use of the word dysmenorrhea should be discontinued, as it forever suggests a mere mechanical condition. In its stead I propose the term *menorrhagia* as a symptomatic designation that is etymologically in accord with associated terms, and does not tie us to a theory. It, again, is believed that a given case of *menorrhagia* is due to an inhibitory spasm, it should be called a *menorrhspasm*.

This *menorrhspasm* is usually accompanied by a permanently hyperesthetic condition of the endometrium, and is often indicated between periods by a spasmodic stricture of the internal os when an attempt at sounding is made. Exactly how much of this intermenstrual stenosis is spasmodic, and how much fibrous, remains to be proven. The existence of the fibrous variety is, of course, undoubted; but the ease with which ether relaxes many canals sufficiently to permit a dilator to be inserted indicates that they can not be common, for of course an anesthetic could have no effect upon fibrous tissue.

Pathological antelexion is also frequently found associated with *menorrhagia*; but since the equal degree of this form of deviation may be found without pain, there can be no essential relation of cause and effect. The same may be said of chronic endometritis and metritis. The frequency of *menorrhagia* and its probable cause, *menorrhspasm*, during a chronic metritis, without any evidence of stenosis, is an additional proof of the non-mechanical nature of this condition, as the inflammation would doubtless interfere with contraction, and aggravate spasm at the same time.

In presenting these conceptions as a novelty, I do not wish to be understood as claiming the idea of spasm as connected with painful menstruation. Such a condition has been conceded all along, and is well understood by the patients

themselves when they speak of "cramps." But the contractions have been supposed to cause pain, because the flow was pent up. The spasm, as an inhibition of a normal excretion, has not been dwelt upon.

Menorrhspasm, in brief, may be said to be a neuro-myotic storm of the uterine neuromuscular apparatus, which renders the excretion of the menstrual fluid temporarily impossible. Its remote causes may be traced to all the influences in modern life which hinder the proper development of animal life in young women.

The treatment of the disease is both general and local. Many cases get well after regulation of the bodily functions and the correction of imperfect hygiene, but many resist such measures. Of these a goodly proportion will yield to percutaneous applications of the galvanic current, poles being applied to the hypogastric and lumbar regions, and a current of from twenty five to fifty ma. being turned on without shock. But often we must resort to local treatment; and of the nature of the local treatment that is most appropriate I have had some very positive experience—an experience, in fact, which led to the conception of the pathological condition advocated in this paper. Forcible dilatation certainly cures many cases, doubtless by paralyzing the irritable fibers, as in fissure of the anus, and by stimulating nutrition; but it is not a sovereign remedy in a large proportion of cases. In my experience a more certain and less formidable remedy may be found in the intra-uterine action of one pole of a galvanic current—usually the negative pole—when a promotion of flow is desired with a current varying from fifteen to fifty ma. *pro re nata*. A few such applications, during one or two inter-menstrual periods, has cured a number of cases in my hands. A typical case was that of a young French girl of twenty-four, who had been *menorrhagic* since puberty, becoming much worse during the year preceding her application for treatment. She was badly constipated, and I at first expected to relieve her by correcting this, but her next menstrual period was as bad as ever. Examination then showed a small uterus with healthy surroundings. The sound could not be passed beyond the internal os. Twenty-five milliamperes, positive, were given for two minutes with the electrode in this position. Six days later the same instrument went to the fundus, without the use of a tenaculum, and forty milliamperes were given. This was followed by an easier flow than for several years. Two similar applications were made during the next inter-menstrual period, followed by a painless flow. Since then five menstrual periods have passed, all normal and free from pain.

Among my notes of married women treated in this way for menorrhagia, three who were apparently sterile have become pregnant and borne children.

As contrasted with forcible dilatation this method is simple, does not require an anesthetic, and may be employed in young girls without the use of a speculum.—*Dr. G. B. Massey, Maryland Medical Journal.*

THE EPIDEMIC OF INFLUENZA.—For some ten years past I have seen the disappearance in great measure of the common cold, with the thick purulent secretion, and the prevalence of a type distinctly epidemic and contagious in a marked manner. The symptoms vary somewhat in individuals, but, generally speaking, the attack commences by general muscular aching. Shivering is present, though the temperature may be 1° to 3° above the normal. More or less frontal headache, with a feeling of great prostration, is complained of. During the first night the skin is described as burning hot, though the actual temperature seldom exceeds 100° . On the second day there may be running from the eyes and nose of an acrid watery fluid. But this year less of the nasal symptoms have been present. The usual complaint is of soreness of throat, pain in the submaxillary region and down the course of the recurrent laryngeal nerve; on the second night profuse perspiration sets in, and in the morning of the third day the aching pains have left, but a most irritating laryngeal cough is present. This is the real feature of the epidemic as I have found it, and no remedy, local or general, seems to relieve it.

In many cases what is described as mumps occurs. It is not mumps, but an enlargement of both tonsils outwardly, never inwardly, at the same time causing the sterno-mastoids to bulge. This complication is an angioleucitis, is most obstinate, and often remains for four to six weeks, and is accompanied by unusual prostration. Sometimes only groups of the smaller lymphatics of the neck are affected. In other cases the laryngeal symptoms are latent at first, and severe abdominal pains, with or without diarrhea, generally the latter, are observed. But whatever the variation in the onset of the disease, the itching laryngeal cough is generally present. This cough is very peculiar. No *râles* or whistling are heard on auscultation over the lung area, but in the morning a loud *râle* is obvious in the trachea. The cough is always bad on lying down in bed for one to three hours, also on awakening in the morning. To go out on a damp, foggy day seems to have no bad effect, but a warm bedroom is certain to start the cough, and, once started, on it goes.

This influenza is not confined to transitions of a sudden character in the weather. It occurs in the dry northeasterly cold winds of February and March quite as much as in the capricious autumn and early winter temperatures.

In this and the surrounding parishes few houses have escaped an attack. It attacks the so called middle and upper classes most severely. As to its extremely infectious nature I have no shadow of doubt, and I say this while being fully aware of the risks of fallacies, and of reasoning from imperfect or ill-observed data. I believe we have here, as elsewhere, ever endemic, a mild form of the old influenza. The accounts of the Russian outbreak are imperfect, but I think it is only a severe form of the ordinary type. This is no unusual occurrence in other diseases of an epidemic character. I have had more severe cases of this than in any former year.

As to treatment, many patients fight it out and go on with work as usual. In children the collapse at first is such that they lie listless in the mother's or nurse's arms. They only want cold water to drink, and nothing else. With children I have seen a little more wheezing between their shoulders than in adults, where it is rare.

When the patient will stay indoors, I give at once, in adults, gr. xx of salicylate of soda, two drops of tincture of aconite, and ten grains of antipyrin, not to lower temperature, but to relieve the muscle pains. This combination produces the perspiration during the first night, and materially shortens this stage. I let adults go out on the third day. A free saline aperient gives great relief. In children, after the heavy miserable stage is past, say on the fourth day, I give large doses of syrup of iodide of iron, which is very effective. For adults, iron in forty minim doses of tinct. ferri. perch., and I may mention that I find very large doses of this tincture keep the bowels well open, while small doses constipate. If there is much depression, syrup of bromide of quinine is often useful. As to the cough, sprays and inhalations of every sort I find generally unsuccessful in giving ease. Opiates give little relief, and when they do, so upset the system that, bad though it is, patients "prefer the cough." I can only advise patients to try not to cough—to breathe through the blanket and keep still; to be in the air, however bad or foggy, as much as possible, and keep out of warm rooms, however comfortable. This advice does not extend to children, who show more of the bronchial symptoms, but it does where only the laryngeal cough is present. Saline aperients are most useful at all stages.

One great help is to cover the head and back of the neck, if indoors, and always at night, with a warm shawl fastened under the chin. More people catch cold through the back of the neck than through any part of the body. Instinct prompts us to put up our collar when chilly. I conclude that influenza is an endemic in and about London, and that it is the same disease which now prevails on the continent in a more severe type. It is infectious if it enters a house; few if any inmates escape. The person who brings it can generally be traced. It has increased in severity, in my experience, during the past ten years, and this year's epidemic is the most severe I have seen—*Dr. W. Gordon Hogg, British Medical Journal.*

FRACTURE OF THE LARYNX; RECOVERY. (By Dr. Alfred Sokolowski, Warsaw.) The author details the following rare and very interesting case: A well-made peasant girl, aged twenty years, with her apron firmly tied round her neck, was caught from behind by a strap of a threshing machine working at full speed. She at once felt an agonizing pain about her larynx, associated with intense difficulty in breathing, which was soon followed by a suffocating cough, with an abundant sanguinolent expectoration, the blood-spitting lasting for several hours. On examination on the next day there were found intense edema and cyanosis of the face, marked general subcutaneous emphysema of the neck, severe dyspnea, very difficult swallowing, almost incessant cough with purulent sputa, and extremely hoarse voice. On palpation through considerably inflated tissues, only a vertical fracture of the right wing of the thyroid cartilage would be made out. But on a laryngoscopic examination the left ala was also found to be similarly fractured, the fragments on both sides being so much displaced inward as to cause a nearly complete obliteration of the lumen of the larynx. (The laryngeal mucous membrane, however, was not ruptured, but only highly congested.) The patient's breathing being alarmingly difficult, laryngotomy inferior was performed without delay; on opening the larynx, the cricoid cartilage as well proved to be broken anteriorly. During the operation, two fragments, each of the size of a pea, escaped from the wound. A large tracheotomy tube having been inserted, the girl felt greatly relieved. There was some fever (38.5°C.) for the first three days, but subsequently the temperature returned to the standard. In the course of the first fortnight the expectoration was occasionally

found to contain small fragments of dead cartilage. The patient's breathing, however, soon became painless and free, cough and expectoration gradually lessened, and her general state steadily improved. Still, any attempt at removing the tube was invariably followed by an attack of suffocation. The latter circumstance, as well as certain peculiarities of the laryngoscopic aspect of the parts (a considerable displacement of the santorianian cartilages, etc.), led the author to the supposition that the posterior segment of the cricoid cartilage might be also broken. Starting from the supposition he made, three months after the operation, a laryngo-fissure ascending from the tracheotomy hole up to the hyo-thyroid membrane. Contrary to his expectations, he found that the whole cricoid cartilage had disappeared tracelessly, the upper posterior laryngeal wall being formed by the lower portion of the anterior wall of the pharynx. In view of the discovery, it remained only to close the wound with sutures and re-insert the tube.

The patient again made a speedy recovery and, two months later, left the hospital perfectly well, her breathing being quite free. When seen a year after the accident, the girl was able to breathe freely with the tube hermetically corked, and that during the whole experiment of three weeks' duration. Hence the author felt justified to dispense with the tube altogether. In a few days, however, the patient's breathing became again difficult, which induced the author to re-introduce the tube. Analyzing his remarkable case, Dr. Sokolowski points out: (1) That cases of fracture of the larynx are extremely rare. As a matter of fact, international literature up to the date contains not more than eighty or ninety cases. Fischer's collection embraces seventy-five cases published since Morgagni's time up to 1881. To those Dr. Sokolowski adds later cases reported by Drs. Morell Mackenzie, Roe-Soyons, Knaggs, Schottok, Arbutnot Lane, and Besner. (2) That among laryngeal fractures a simultaneous lesion of the thyroid and cricoid cartilages represents a relatively rare occurrence (of Fischer's seventy-five cases, only nine are of the kind). (3) That prognosis is very grave (of Fischer's seventy-one cases, as many as fifty-six ended lethally). It is especially bad when the cricoid cartilage is involved. Of Durham's twenty-eight and Fischer's twenty-seven, none recovered. The only case ending in recovery was published by Treulich, *Centrbl. f. Chirurg.* No. 14, 1876,

Sokolowski's being, therefore, only a second instance. (4) That it is only the third case of laryngeal fracture in which a laryngoscopic examination was made shortly after the accident (the other two being described by Drs. Schroetter and Morell Maekenzie), and the first case in which the laryngoscope furnished a quite distinct confirmation of the results obtained from an external examination.—*Gazeta Lekarska, Annals of Surgery.*

DANGER OF STROPHANTHUS IN RENAL DISEASE.—On examination of sections of the kidney after experimental poisoning with extracts of strophanthus, Ergasse invariably found the kidneys hyperemic, partly in the cortex, partly in the medullary zone, but chiefly at the tips of the pyramids. He therefore warns us that clinically we must bear in mind that, where there is coincident nephritis, preparations of strophanthus are contra-indicated, otherwise an increase of the renal trouble may readily supervene. There is pretty general agreement that the action of the drug is most satisfactory in mitral disease, care being always taken that the degeneration of the myocardium has not proceeded too far. Hence it is best not to prescribe it in advanced stages of heart disease, especially when this is accompanied by arterio sclerosis and interstitial nephritis.—*Centralblatt. f. klin., London Practitioner.*

ANTISEPTIC TREATMENT OF PUERPERAL ECLAMPSIA.—Dr. Maurice Rivi re, of Bordeaux, speaks highly of the results obtainable by the antiseptic treatment of puerperal eclampsia. He outlines his method of treatment in the *Gazette hebdomadaire*, November 22, 1889, as follows:

1. *Preventive Treatment.* First, a strict milk diet should be enforced and one of the following capsules given every two hours:

Naphthol	gr. xxxviiij;
Sacchar	} �� gr. xxxj.
Bismuthi salicyl.....	
M. et div. in caps. No. viij.	

Second, every third or fourth day saline aperient or a dessertspoonful of sulphate of soda in a wineglassful of water should be given. Third, the functions of the skin and kidneys should be stimulated by hot baths given twice a week.

2. *Curative Treatment.* First, absolute quiet and repose of the patient should be insisted upon. Second, ten to fourteen fluid ounces of blood should be taken from the patient in order to reduce the quantity of

poison in the system. Third, the following potion should be administered:

Aqu� dest.....	} �� f. �ij.
Syrup. pruni, Virginian�e....	
Chloral. hydrat	} �� �ss-�j.
Sodii bromid	

Fourth, clysters containing half to one dram of chloral may be administered and chloroform anesthesia resorted to if necessary. Fifth, Dr. Rivi re urges that any forcible attempt to expedite the birth of the fetus during labor should be avoided, since such procedures only irritate the cervix and are likely to do harm. After the birth of the fetus blood-letting is useless, and any possible good that would have been obtainable by it has been accomplished by the physiological hemorrhage.—*Med. and Surgical Reporter.*

THE SUBCUTANEOUS ADMINISTRATION OF IRON.—Professor Rosenthal, of Vienna, writing in a Pesth medical journal on the subcutaneous administration of iron, states that this method is advantageous in the cases of delicate neurasthenic persons who suffer, as such often do, from atonic dyspepsia. Here even small doses of iron taken by the mouth will sometimes produce disorder of the stomach. In severer forms of disease, such as pernicious anemia, malarial cachexia, and the graver forms of leukemia, there does not appear to be any advantage in the employment of the hypodermic method of administering iron. Two new preparations are recommended by Professor Rosenthal for hypodermic use, viz., the peptonate and the oleate of iron. He states that he has never seen any bad results follow subcutaneous injections of iron preparations, and he explains the fatal consequences that have occasionally been reported as following injections into vascular tumors of the head, by the fact that the vessels composing such tumors are generally closely connected with the veins of the dura mater. He has frequently seen venous enlargements in the legs undergo shrinking after being injected with dilute perchloride of iron, no dangerous symptoms ever ensuing.

VENESECTION IN LEAD-POISONING.—Dr. Wilhelm, of G ttingen, strongly recommends that in cases of lead poisoning a small quantity of blood should be taken from the arm. He has practiced this treatment in twenty-five cases, and speaks warmly of the success he has met with, the patients in some cases expressing themselves as greatly relieved immediately after the operation, and the affection taking a marked change for the better from that time.—*Lancet.*

The American Practitioner and News

"NEC TENUI PENNÆ."

Vol. IX. SATURDAY, FEBRUARY 1, 1890. No. 3.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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A NEW CONTRIBUTION TO THE STUDY OF PNEUMONIA.

The microbial origin and nature of acute croupous pneumonia has been religiously believed in by the progressive pathologist since 1882, when Friedlander discovered in pneumonic exudates the coccus which bears his name, and when the etiological and pathological relationship of the microbe to the disease was all but confirmed through subsequent experimentation by himself, Leyden, Gunther, Talamon, Affanassien, and others. Nevertheless the doctrine was held with misgiving, since certain important links in the chain of evidence were yet to be supplied. Thus the facts that pneumonia is most commonly a sporadic affection, rarely if ever prevailing under epidemic influence, and seldom under circumstances that would allow one case to stand in causal relationship to another, gave force to the arguments of the doubter, while the scarcely questionable influence of cold as a factor in the etiology of the disease confirmed the skepticism of the skeptics. But the coccus continued to be always demonstrable in true pneumonic exudates, while mice, dogs, rabbits, and guinea-pigs would develop the symptoms of pneumonia when this exudate was injected into the

pulmonary parenchyma, which in the autopsy would always show red hepatization and more microbes, which could be cultivated and be made means for the further propagation of the disease.

Thus the matter has stood with more than a balance in favor of the truth of the microbial doctrine.

Recently, however, some needed light has been thrown upon the question, under which the truth of Friedlander's conclusions seems to stand confirmed.

The *Bulletin de Thérapeutique*, December 15, 1889, gives the results of the work of Platania, an Italian observer who, in experimentally following the researches of Friedlander, brings forth some pregnant facts in confirmation of the master's position. These experiments are thus described and commented upon in the *Boston Medical and Surgical Journal* of January 23, 1890:

"Platania has produced pneumonia by inoculating the microbe by the natural passages, at the same time favoring the result by aseptic traumatism of the lung through the thoracic parietes, or by causing the animal to inhale irritant gases, as ammonia, hydrochloric acid, etc. He has found, as a condition of successful experimentation, that some degree of traumatism at the point of inoculation, whereby the vital resistance of the lung is weakened, is necessary; it was not enough that the pneumo-coccus should be simply inhaled, and all such experiments failed to induce pneumonia.

"Platania has endeavored to ascertain whether chilling of the pulmonary texture, formerly regarded as the direct cause of pneumonia, was also a predisposing condition of the production of the disease in animals inoculated with or made to inhale the specific microbe. Animals after inoculation were placed in a frigorific apparatus for a brief time; these invariably succumbed more readily to the disease with a more elevated temperature and more extensive pneumonic lesions than animals similarly inoculated that had not been exposed to the cold. Out of eleven guinea-pigs inoculated by the trachea and exposed for half an hour to intense

cold, in eight the result was positive and in three negative. 'If,' he says, 'we compare this experiment with that of simple tracheal inoculation, where in ten cases nine were negative, we are obliged to conclude that the influence of chilling does really manifest itself in our experimentation as a condition which predisposes the organism to cultivate in the lung the pneumo-coccus of Friedlander.'

"Platanía also varied the experiment, both in subjecting the animals to refrigeration and in making use, as the material of infection, of dust containing the specific disease germs, which the animals were made to inhale with cold air. Out of eight cases, three were positive and five negative.

"As the complement of these researches, he studied the action of chilling alone. He placed a certain number of animals for a time in an elevated temperature (104° F.), then chilled them in various manners, by plunging them directly in ice-cold water, by inclosing them in boxes surrounded by a frigorific mixture, etc. The results were conformable to those already obtained by other experimenters, that is, there was found a state of hyperemia of divers organs, but never the least focus of inflammation or any thing like pneumonia in any of the animals subjected to the experiments of this kind.

"It is not yet definitely settled whether the encapsulated micrococcus of ordinary saliva, called by Sternberg *micrococcus Pasteuri*, be readily identical with Friedlander's pneumo-coccus. It will be remembered that Sternberg induced pneumonia in rabbits by injecting this microbe; and still more recently Chautemesse has shown by numerous experiments that the injection of two or three centimeters of normal saliva into the lung determines in twenty-four hours the death of the animal, after having produced an intense fever and a red hepatization, with at the same time a fibrinous pleurisy and pericarditis in which the encapsulated micrococci exist in great numbers."

If the experiments of Chautemesse be confirmed, it may be truly said that every man

carries in his mouth the elements of his own undoing, since he may set up pneumonia in himself at pleasure by simply "swallowing down his spittle"—the wrong way.

Notes and Queries.

TENTH INTERNATIONAL MEDICAL CONGRESS.
In accordance with the decision of the Ninth Congress, at Washington, the Tenth International Medical Congress will be held at Berlin, from August 4th to 9th, 1890.

By the delegates of the German Medical Faculties and the chief Medical Societies of the German Empire, the undersigned have been appointed members of the General Committee of Organization. A Special Committee of Organization has also been appointed for each of the different sections, to arrange the scientific problems to be discussed at the meetings of the respective sections. An International Medical and Scientific Exhibition will also be held by the Congress.

We have the honor to inform you of the above decisions, and at the same time cordially to invite your attendance at the Congress. We should esteem it a favor if you would kindly extend this invitation to your friends in medical circles, as way may offer.

We beg to accompany our invitation by a copy of the statutes and programme, as also by the list of the intended sections and their special committees of organization.

All communications must be directed to the General Secretary, Dr. Lassar, Berlin, NW., Karlstrasse 19.

DR. RUDOLF VIRCHOW,
President.

Regulations and Programme: 1. The Tenth International Medical Congress will be opened in Berlin on Monday, August 4, 1890, and will be closed on Saturday, August 9th.

2. The Congress shall consist of legally qualified medical men who have inscribed themselves as members, and have paid for their card of membership. Other men of science who interest themselves in the work of the Congress may be admitted as extraordinary members.

Those who take part in the Congress shall pay a subscription of twenty marks (one pound stg. or \$5) on being enrolled as members. For this sum they shall receive a copy of the Transactions as soon as they appear. The enrollment shall take place at the beginning of the Congress. Gentlemen may, however, be enrolled as members by sending the amount of the subscription to the treasurer,* with their name, professional status, and residence appended.

3. The object of the Congress is an exclusively scientific one.

4. The work of the Congress will be discharged by eighteen different sections. The members shall declare upon enrollment to which section or sections they intend more particularly to attach themselves.

5. The Committee on Organization shall, at the opening sitting of the Congress, suggest the election of a definite committee, or bureau, which shall consist of a president, three vice-presidents, and a number (as yet undetermined) of honorary presidents and secretaries.

At the first meeting of each section a president and certain number of honorary presidents shall be elected; these latter shall conduct the business of the sections in turn with the presidents.

On account of the different languages employed, a suitable number of secretaries shall be chosen from among the foreign members. The duties of the foreign secretaries shall be confined to the sittings of the Congress.

After the termination of the Congress the editing of the Transactions shall be carried out by a committee specially appointed for this purpose.

6. The Congress will assemble daily, either for a general meeting or for the labors of the different sections.

The general meetings will be held between 11 and 2 o'clock. Three such meetings will take place.

The time for the sittings of the various sections will be fixed by the special committee of each section, it being understood,

however, that no such sittings are to take place during the hours allotted to the general meetings.

Joint sittings of two or more sections may be held, provided that the Bureau of the Congress can offer suitable rooms for such sittings.

7. The general meetings shall be devoted to (a) Transactions connected with the work and general management of the Congress; (b) speeches and communications of general interest.

8. Addresses in the general sittings, as well as in any extraordinary meetings which may be determined upon, can only be given by those who have been specially requested by the Committee of Organization.

Proposals relative to the future management of the Congress must be announced to the Committee on Organization before July 1, 1890. The committee shall decide whether these proposals are suitable to be introduced for discussion.

9. In the sittings of the sections questions and problems will be discussed, which have been agreed upon by the special committees of organization. The communications of those appointed by the committee to report on a subject shall form the basis of discussion. As far as time allows other communications or proposals, proceeding from members and sanctioned by the Committee of Organization, may also be introduced for discussion. The bureau of each section decides as to the acceptance of such offered communications, and as to the order in which they shall come before the meeting, always provided that this point has not been already determined in the sitting itself by a decree of the section.

Scientific questions shall not be put to the vote.

10. Introductory addresses in the sections must as a rule not exceed *twenty minutes* in length. In the discussions no more than *ten minutes* are allowed to each speaker.

11. All addresses and papers in the general and sectional meetings must be handed over to the secretaries, in writing, before the end of the sitting. The Editorial Committee

* Treasurer's address: Dr. M. Bartels, Berlin, SW., Leipzigerstrasse 75. Please to inclose a visiting-card.

shall decide whether, and to what extent, these written contributions shall be included in the printed Transactions of the Congress. The members who have taken part in the discussions will be requested to hand over to the secretaries before the end of the day, in writing, the substance of their remarks.

12. The official languages of all the sittings shall be German, English, and French. The regulations, the programme, and the Agenda for the day will be printed in all three languages.

It will, however, be allowable to make use of other languages than the above for brief remarks, always provided that one of the members present is ready to translate the gist of such remarks into one of the official languages.

13. The acting president shall conduct the business of each meeting according to the parliamentary rules generally accepted in deliberative assemblies.

14. Medical students, and others persons, ladies and gentlemen who are not physicians but who take a special interest in the work of a particular sitting, may be invited by the president or be allowed to attend the sitting by special permission.

15. Communications or inquiries regarding the business of separate sections must be addressed to the managing members thereof. All other communications and inquiries must be directed to the General Secretary, Dr. Lassar, Berlin, NW., 19 Karlstrasse.

Editors American Practitioner and News:

NEW YORK LETTER.—It is like getting home again for one who has spent the most important part of his educational career in this great medical center, to return after four years and watch the workings of the great hospitals and clinics. At the Manhattan Eye and Ear Hospital, from which five years ago I resigned the house-surgeonship after two years of service, I find the same familiar faces with few exceptions. Dr. Agnew, the founder and for many years one of the main stays of the institution, is dead. Many of the young men who worked side by side with me are now prominent in

the field of practice in different parts of the country; the others, however, are still working away at the same table day after day, furnishing relief to the suffering, and fitting themselves to fill the places of their elders, when they, like Dr. Agnew, shall be called from their labors. Day in and day out hundreds are given relief at this institution. Since the removal of the hospital into its present building the number of patients treated has increased very much, and its clinics are daily crowded by medical men from all parts of the country seeking clinical instruction. The Manhattan seems to be the most popular of all the eye and ear clinics for Southerners. They are cordially treated, and the material of the hospital is at their command if they seek clinical instruction. Many of the prominent members of the staff were formerly Southerners, and most of its House Surgeons, a position eagerly sought for, has been filled by young men from the same part of our country. Its House Surgeons are scattered all through the South, and are among the most promising specialists in their respective cities.

The first clinic I sought on arrival was my old haunts, and through the kindness of the staff on duty, I spent my afternoon most profitably. In the evening, through the courtesy of Dr. D. D. Pomery, I attended the meeting of the Section on Ophthalmology of the New York Academy of Medicine. The paper of the meeting was by Dr. H. Knapp, on Tuberculosis of the Conjunctiva. Dr. Knapp described in a most interesting manner a case recently under his care. In this case the question of diagnosis was for some time in doubt. When Dr. Knapp saw it there were simply two small ulcers on the conjunctiva, and a history of former nose trouble with some slight destruction of tissue about the nose. Dr. Knapp excised the ulcers, and with the assistance of Dr. Weeks, submitted the excised portions to tests for the tubercle bacilli, also the tubercle in the tissue. He also inoculated the anterior chamber of rabbits with portions of the excised tissue, and in course of several weeks tuberculosis of the iris developed. Dr. Knapp

said tuberculosis of the conjunctiva as a secondary manifestation of tuberculosis in other portions of the body was sometimes encountered, but for the disease to arise primarily in the conjunctiva was exceedingly rare. From a careful research of the literature of the subject he found only two perfectly authentic cases of primary tuberculosis of the conjunctiva.

The question was discussed by Dr. Swan M. Burnett, of Washington, who read the report of a case similar in many respects to Dr. Knapp's, occurring in a negro, in which microscopical and bacteriological examination proved the presence of the tubercle cell and the bacilli.

The discussion was further made interesting by remarks from Dr. Lustgarten, recently of Vienna, who had examined the specimens of Dr. Knapp. He thought, from the history of previous nose trouble, that it was a case of lupus of the conjunctiva secondary to lupus of the nose.

Dr. Lustgarten has recently moved to New York from Vienna. He is extensively known from his writings, especially as the discoverer of the syphilis germ. He is a man of probably thirty-six years, wears glasses, speaks English well, considering only a few months' residence in this country; beard cut after the prevailing Boulanger style. He is a syphilographer of world-wide fame, and no doubt will eventually come to the front in the great city full of active, wide-awake, and progressive men.

Another face familiar to me, but nevertheless always interesting, that I observed in the audience at the meeting, was that of a man of two and thirty years, with small mustache, quick, restless moving eyes that project quite prominently from the orbit, who sat nervously pulling his mustache. He was Dr. Karl Koller, who is now a resident of New York.

His name will forever be connected with cocaine, for it was he who first demonstrated that when dropped into the conjunctiva of the healthy eye cocaine produced an anesthesia so complete that all forms of surgical operations could be performed without dis-

comfort to the patient. He too has left Vienna to try to seek fortune in the New World. As for fame, both the name of Koller and Lustgarten are to-day known of all students of medicine, and thousands of patients can daily bless the name of Koller for the relief to pain he furnished to suffering humanity by his most wonderful discovery.

The meeting of the Society closed with a demonstration of cases.

The next day, Tuesday, through an invitation from Dr. Leffert, I went through the new buildings of the College of Physicians and Surgeons and the Vanderbilt Clinic, which have been so generously endowed by the Vanderbilt family. In the throat department I saw a large number of cases, and a young and active staff of six men were required to treat the patients in attendance in two hours. Dr. Leffert tells me that the clinic has grown to such proportions that it requires all the time allotted to his staff to perform the work. The work is done most thoroughly. The rooms are fitted up with all modern improvements in the way of instruments and cautery and motor battery, and now, instead of giving every patient that presents himself with nose or throat trouble an innocent spray of carbolic acid and borax, or a mild astringent, the source of trouble, which is usually found to be obstruction in the nose from turbinated hypertrophies, deviated septum, or post-nasal adenoid, or in the throat from hypertrophied tonsil, faucial and lingual, is attacked by radical surgical methods, with cautery, saws, and drills, and the source of the trouble eradicated. Thus the patient is relieved.

J. M. RAY.

NEW YORK, January 23.

PURE AIR IN CHURCHES.—Probably all church-goers have at one time or another experienced the irresistible tendency to drowsiness or somnolence that begins to be felt about the beginning of the sermon, and is only finally dissipated on quitting the church for the open air. Many people are inclined to assume rather hastily that pulpit oratory is to be held accountable for the creation of the soporific influences of the

hour; but medical men and others who have considered the subject must be aware that in nine cases out of ten it is the closeness and heat of the atmosphere, and not the length of the sermon that is at fault. Because churches are, as a rule, large and roomy edifices, architects assume that ventilation is not needed, and vicars and rectors are content to hold the same belief, although they are even greater sufferers by the foul state of the atmosphere than the congregation. Clergyman's sore-throat, hoarseness, and voicelessness are directly induced by the constant and continued efforts of speech in a heated and relaxing atmosphere, and the faculties of the congregation are dulled and blunted by the same cause. Church windows are not made to open; and even if they were, unless the entering air is directed upward to a considerable height, it falls upon the heads of the congregation, and complaints of draughts are made to the churchwardens, which promptly secure the closing of the windows. Most churches are heated by stoves or hot-water coils, but in very few cases is there any arrangement for admitting fresh air to come into contact with the heated surfaces of pipes or stoves before passing into the church. Exhaust ventilators in the roof are practically unknown in churches; consequently the foul and heated air never escapes, and after service as the heated air cools it descends, and a fresh congregation rebreathes the used air of its predecessors. In this respect churches are even worse off than theaters, where the cubic space per head is far less, for all theaters have sunlight burners in the roof of the auditorium, which act very efficiently as exits for foul air. Although different systems commend themselves to different persons, we are inclined to advocate in winter the admission of fresh air warmed by contact with hot water coils beneath gratings in the floor, and numerous exhaust ventilators in the roof provided with rings of gas jets to keep up the temperature of the escaping air. In summer fresh air should be admitted by revolving panes in the windows, so as to secure an upward direction, the exhaust

ventilators being also kept in action. If places of worship were adequately ventilated, "church headache" would soon become as little known as "theater headache" now is, thanks to the regulations that the later places of amusement are now subjected to.—*British Med. Journal*.

Editors American Practitioner and News:

FRACTURE OF THE FRONTAL BONE.—Arlene Wells, male, aged fourteen years, on July 30, 1889, sustained a compound comminuted depressed fracture of the left lower part of the frontal bone, with rupture of brain membranes and contusion of brain substance. After removing several small fragments of detached bone, and one large fragment which was partially attached and depressed, causing convulsions, the brain was exposed from the inner angle of the right eye to a point one inch above the outer extremity of the left eyebrow, making an open space three inches by one and a half. A piece of the vault of the orbit was also removed, as it was detached. The wound was cleansed and a bone drainage-tube inserted. The patient left his bed in ten days and has made a good recovery, with the exception of loss of sight in the left eye. There were two interesting features in the case: The larger fragment of bone removed contained the frontal sinus, which had a capacity of one and one half drams, although writers on the subject say that this sinus does not begin to make its appearance until the age of fifteen or sixteen. The longitudinal sinus was torn across, but the bleeding from same was arrested without surgical interference.

RICHMOND, KY.

JOHN M. FOSTER, M.D.

THE INFLUENZA OF 1847.—I observe that influenza is spoken of as an epidemic catarrh, and descriptions of it refer especially to running of the nose and eyes, against which treatment is directed, with the hope of arresting the disease at its onset. Remembering well the epidemic of 1847, I should say that catarrh was by no means a constant symptom, very many persons presenting merely the condition, in a very se-

vere degree, of what is called a feverish cold; and in cases which were fatal by inflammation of the chest organs there was no initiatory catarrh. Referring to my notes, I find that the first cases which I saw were in November, 1847, in the house of a friend, where a little girl took to her bed with the usual symptoms of pyrexia, hot skin, furred tongue, great prostration, sore throat, etc. Then all the other children were similarly affected, afterward the servants, and then the master of the house, who died of acute pleurisy. These cases I thought were gastric fever, but I soon altered my opinion in favor of some specific fever, when I found the disease spreading; for other cases soon occurred in the neighborhood, and in a fortnight afterward the whole metropolis was involved. The fatal cases were by bronchitis, pneumonia, pleurisy, and pericarditis. The occurrence of the latter was very remarkable, as there was apparently no rheumatic state to account for it. I lost a friend from pleurisy and pericarditis: and a very promising student who had just been examined at the London University died of the same complication. Others of the same kind I saw at the hospital, among them being the Sister of the ward, who, although ailing, had been at her duties in the morning, when suddenly being seized with a pain at her side denoting an acute pleurisy, she died at night. In none of these cases was there any catarrh. Although the increase of mortality at this time was very great, the percentage of deaths in those attacked was small. It was said that in the epidemic of 1837 half London was attacked, and as regards 1847 I have a note saying it was conjectured that at least three fourths of the population were affected. The whole of the medical staff at Guy's were in turns attacked, although their illness lasted only a few days, and I remember that on one occasion not a single member came to the hospital to go round the wards or to lecture, so universal was the epidemic. I think it was in 1840 that Henle published his papers suggesting that contagious diseases were due to parasitic life.—*Dr. Samuel Wilks, Lancet.*

A "CORNER" in antipyrine is reported in New York. A number of leading druggists were compelled to refuse prescriptions containing antipyrine, as they had none in stock. The supply began to run short about January 4th, and druggists who had but a short supply offered as high as three dollars an ounce for this drug, which ordinarily sells at one dollar and twenty-five cents an ounce at wholesale. Even this exorbitant price failed to produce the drug from the few retailers who had it in stock. Wholesale dealers say that the supply in the market is wholly exhausted, and that there has been no attempt to corner the market in antipyrine, as was done in the case of quinine some years ago. The prevalence of *la grippe* has also caused a scarcity of the latter drug. Quinine is ten cents higher per ounce this week than it was a month ago, and the last quotations show that it has taken another rise of three cents per ounce.

VENESECTION IN CHLOROSIS.—The practice of venesection in chlorosis would not at first sight appear likely to yield good results, but that it is capable of acting most beneficially is vouched for by Dr. Wilhelmi, who has for some time past employed it with great success in typical cases of chlorosis (not of lead-poisoning, as was by an error printed in last week's issue). About three or four ounces of blood only should be taken, the patient being in bed and being covered up with blankets and plied with hot drinks until sweating comes on. It would appear that the severer the case the more benefit may be expected from the bleeding, but that treatment is of little use in mere hysterical symptomatic anemia.—*Lancet.*

THE London Times is carrying on a crusade against physicians who, in the general practice, treat infectious diseases, and from them go straight to the bedside of patients suffering from forms of diseases that are not likely to spread. A general practitioner, writing to the Times, says: "The doctor comes across a case of scarlet fever, small-pox, or other infectious disorder; his other

patients are needing his visits, a midwifery case may be, and so he goes on with his work until his round is finished. In the evening, surgery work again. Each day brings similar work, only the infectious disorder has become more infectious. Now, how is he to prevent spreading infection, working in the way I have stated? True, he could go home and change his clothes, and in other ways disinfect himself; but does he? Does the conscientious doctor do this? And what about his own household? I certainly think with your correspondent that 'a notification of infectious doctors' is as much wanted as a 'notification of infectious diseases act.'"

DR. OLIVER P. REX, of Philadelphia, died from the effects of the grip on Sunday, January 5th. A few days before he was taken with the disease, but he kept up, hoping to fight it off and forget it in the duties attending an extensive practice. Pneumonia developed, however, and brought about a fatal termination.

TUBERCULOSIS FROM CIGARS.—It is stated that a German physician, on examination of a number of cigar tips, found that many of them were infected with tubercle bacilli. The makers were tuberculous, and in the manufacture of the cigars moistened the tips with their saliva.—*Canada Lancet*.

LA GRIPPE is at its height in Michigan. According to the report of the State Board of Health for the week ending January 4th, seventy-seven per cent of the physicians heard from reported the prevalence of the disease.

DR. HEYMAN, Professor of Hygiene in the Carolina Institute, Stockholm, and editor of the Swedish medical journal *Hygiea*, died suddenly, during a lecture he was giving in Stockholm, from cardiac disease.

PROF. LEYDEN has been summoned from Berlin to a consultation with the Czar's physicians.—*Lancet*.

DR. EDWARD MILLER, son of the late Dr. Henry Miller, Professor of Surgery in the Louisville Medical College, and editor of the Louisville Medical Herald, died at his home in Louisville, January 20, 1890. The cause of his death was heart failure incident upon an attack of *la grippe*. Dr. Miller was a man of uncommon talent and large learning. He dies in the prime of manhood, being forty-eight years of age, and vacates a place in the ranks of medical practice, education, and journalism which it will be difficult to fill.

THE German State Examining Board recently held its annual examinations. Among the 683 applicants 504 were passed.

TYPHUS fever is said to have made its appearance in New York.

SPECIAL NOTICES.

DIOS CHEMICAL CO., ST. LOUIS, MO.: I have used "Dioivburnia" in several cases of amenorrhea, dysmenorrhea, leucorrhea, menorrhagia, and treated abortion with happy effect.

C. W. LEGRAND, M. D.

HEMPSTEAD, TEXAS, August 13, 1889.

G. W. WATTS, M. D., Auxvasse, Mo., says: I find Celerina very useful in cases of old persons whose digestive powers are failing, and in the convalescing period of those old persons from acute diseases, such as pneumonia, bronchitis, gastro-enteric troubles, etc. In two cases recently treated of this kind Celerina seemed to restore both the nervous and digestive system. Both of these cases were very old persons; they are now apparently well.

CHRONIC LARYNGITIS.—

R S. H. Kennedy's Extract Pinus Canadensis (dark).....1 oz;
Drosera rotund.....½ oz;
Pure glycerine.....4 oz.

M. Sig: 15 to 30 drops three or four times per day. Also, in nasal catarrh I think it almost a specific.

HOFF'S MALT (TARRANT'S) has been triumphant at every turn. Leopold Hoff, the manufacturer, has not only caused the firm which has assumed the name "Johann Hoff" to be convicted of circulating a falsified court decision, but succeeded by the excellence of his Malt Extract in obtaining the Bronze Medal at the Hamburg Exhibition and a special medal of honor. This is the only medal ever awarded to a Malt Extract at a public exhibition in the German Empire.

The genuine imported can only be had in the United States under the label "Hoff's Malt, Tarrant's."

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., FEBRUARY 15, 1890.

No. 4.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—KESKES.

Original Articles.

TYPHOID BACILLUS IN MILK AND WATER AND THE PRODUCTION OF PUTRESCINE AND TYPHO-TOXINE.

BY C. J. RADEMAKER, M. D.

Unboiled milk is unquestionably a rich soil for several varieties of micro-organisms. I have no doubt that milk is free from bacteria as long as it is in the milk glands, but the moment it comes in contact with the air of the stables, the hands of the human being, or unclean vessels, or is mixed with water, it is liable to be contaminated with bacteria. If milk is mixed with sterilized gelatine to which no foster or nutritious soil has been added, the gelatine and milk poured on a glass plate to solidify, and covered with a bell jar (also sterilized by painting the inside with a solution of mercuric chloride), the following remarkable changes occur: At first small white points appear, which later on become gray, and in four or five days (the temperature being kept between 65° and 70° Fahrenheit), a porcelain-like elevation appears all over the gelatine, but no liquefaction of the gelatine takes place. If a little of this growth is mixed with sterilized distilled water, dried upon the slide, and examined under the microscope, several varieties of bacilli will be recognized.

In order to separate these different colonies, a sterilized soil, prepared as follows, should be vaccinated with the different col-

onies: Five hundred grams of finely cut beef were boiled for five or six hours with distilled water; to this was added a little sodium chloride and about five grams of peptone, and the solution then neutralized with bicarbonate of soda. It was then boiled in a Papin's tub; it may be sterilized by means of steam. To this solution about ten per cent of gelatine was added, again boiled, the solution filtered, and, when acid, treated with bicarbonate of soda to a faint alkaline reaction. The solution was then put in test-tubes, and again sterilized by continuous boiling for five or six hours, the test-tubes closed by means of sterilized cotton, and lastly covered with gum caps, also sterilized.

One test-tube containing this foster soil was vaccinated with the milk on the plate culture; another test-tube vaccinated with hydrant water, by means of a platinum needle, which was first drawn through the flame of a Bunsen burner, the tubes again closed with sterilized cotton and gum cap, and kept at a temperature of 85° to 90° Fahrenheit from four to twenty days. In the test-tube that was vaccinated with the milk the following changes took place: The upper layer of the gelatine became pearl-like in color, and a thin membrane covered the top of this layer; beneath this layer a slight liquefaction took place, owing to the development of the bacillus amylobacter, but the body of the gelatine remained solid, although through this solid portion colonies of bacteria were developed.

The test-tube that was vaccinated with hydrant water, the gelatine became completely liquefied in less than forty-eight hours.

A sterilized potato was next prepared

in the following manner: It was first brushed, then washed in a one-per-cent solution of mercuric chloride, and allowed to remain in the same solution for one hour. It was then washed with distilled water and boiled for half an hour. While the potato was cooling a double bell jar was washed with a two-per-cent solution of mercuric chloride; on the bottom of this bell jar filtering paper saturated with a one-per-cent solution of mercuric chloride was placed, and upon this the boiled potato was laid, the hand being first immersed in a solution of mercuric chloride. The potato was then cut in two with a knife, which was first drawn through the flame of a Bunsen burner. One half of this potato was vaccinated with the test-tube culture of milk, the other half with the test-tube culture of hydrant water, by means of a platinum needle drawn through the flame of a Bunsen burner. The whole was then covered with a sterilized bell jar, and kept at a temperature between 90° to 100° Fahrenheit for two weeks.

The growth of these bacilli upon potatoes is one of the most remarkable of modern bacteriological investigations. The potato that was vaccinated with the milk culture at first developed a white, shiny spot at the point of vaccination, which in a few days spread over the whole surface; the surface next developed a deep groove in the center, while white elevations sprang up on either side of the groove, the potato at the same time becoming soft and spongy. If a drop of sterilized distilled water is let fall upon the surface of the potato, allowed to remain for a few minutes, and placed upon a slide to dry, then immersed in a bath of earbol-fuchsin and again dried, and examined under the microscope with an immersion lens, we will find a multitude of bacteria, some of which are readily recognized as typhoid bacillus.

The potato that was vaccinated with the hydrant-water culture developed a red, moist surface, which also spread all over the surface of the potato, while at the edges faint violet spots appeared, the whole potato be-

coming soft, while gases emanated from the interior.

When a drop of distilled water was placed upon the surface, and this treated as had been the milk culture, the following varieties of bacilli were recognized, *Bacillus rubra*, *Bacillus violaceus*, and typhoid bacillus.

If the substance in the test-tube containing the foster soil and gelatine that was vaccinated with hydrant water, and allowed to stand for two weeks at a temperature of 90° Fahrenheit, is submitted to distillation, and the temperature not allowed to go above 212° Fahrenheit, a volatile base is obtained which neutralizes acids and forms crystallizable salts, and also forms a double salt with platinum chloride. This salt is insoluble in alcohol, and of a very light lemon-color. 0.0132 milligram of this double salt left after incineration 0.0052 milligram of metallic platinum:

0.0052 : 0.0132 :: 198 : x = 503 molecular weight.
503—(340 + 73) = 90, representing 2 molecules.

Calculated For. $C_2H_4N_2 \cdot 2HCl \cdot PtCl_4$ = 503.
39.36 per cent of Platinum.

Found,

0.0052 ÷ .0132 = 39.39 per cent of Platinum.

This substance has a semen-like odor, and is identical with Brieger's putrescine. The platinum chloride appears under the microscope like cholesterol plates, and the crystals have a silvery luster. This volatile base contains two more atoms of hydrogen in its molecule than Brieger's putrescine, and the platinum chloride contains 39.39 per cent of platinum, while Brieger's putrescine contains 39.52 per cent of platinum. This slight difference must be due to the analyses.

Several pounds of nutritious soil, prepared as above, were vaccinated with the hydrant-water culture, and submitted to a temperature between 95° to 100° Fahrenheit for two weeks. The alkaline liquid was then treated with dilute hydrochloric acid to a slight acid reaction; it was then evaporated on a water bath to a syrupy consistence and allowed to cool. This syrup was exhausted with 96 per cent alcohol and filtered; the filtrate evaporated to dryness and treated with absolute alcohol, again filtered, and the

solution treated with an alcoholic solution of mercuric chloride. This precipitates the ptomaine as a double salt.

This salt is suspended in water and decomposed with hydrogen sulphide, and filtered; the solution of chloride of ptomaine evaporated to dryness, redissolved in water, and the excess of acid neutralized with a drop of solution of caustic soda; the neutral solution treated with alcohol, filtered, and then treated with platinic chloride. The double salt is soluble; for that reason the solution of double-salt was evaporated to dryness and then treated with ether-alcohol to remove the excess of platinic chloride; 0.471 gram of this double salt left after incineration 0.168 gram of metallic platinum:

0.168 : 0.471 :: 198 : x = 555 molecular weight.
 555 — (340 + 73) = 142 (Rep. 2 molecules of base.)
 Calculated for $C_8H_{16}ON2HClPtCl_4$ = 555.

35.67 per cent of Platinum.

17.29 " Carbon.

2.88 " Hydrogen.

2.88 " Oxygen.

2.52 " Nitrogen.

Found 0.168 ÷ 0.471 = 34.18 per cent Platinum.

0.2040 gram of substance gave 0.1300 gram CO_2 =

17.38 per cent Carbon,

and 0.507 gram of H_2O = 2.76 per cent of Hydrogen Nitrogen by Kjeldahl's process, but weighed as Ammonia Platinic Chloride 2.85 per cent Nitrogen.

0.2040 gram of substance was heated with concentrated sulphuric acid according to Kjeldahl's process. This gave 0.0455 milligram of ammonia platinic chloride.

$(NH_3HCl)_2PtCl_4$ = 447. 447 : 0.0455 :: 28 : x = 2.85 per cent Nit. 0.2040 gram of substance gave 0.1300 gram of CO_2 . Equivalent of CO_2 = 44; amount of CO_2 found = 0.1300; Equivalent of $C12$.

Now as 44 : 0.1300 :: 12 : x = 0.3545 C
 And the same substance gave 0.507 gram of H_2O .

Now as Water (H_2O) = 18, amount of water, 0.507 :: equivalent of H_2 , 2,

Now as 18 : 0.507 :: 2 : x = 0.5633H

0.2040 x 285 = 0.5814N

0.2040 — (3545 + 5633 + 5814) = 0.5408 O

0.3545 ÷ 0.2040 = 17.38 per cent Carbon. 0.2040

0.5633 ÷ 0.2040 = 2.76 " Hydrogen.

0.5814 ÷ 0.2040 = 2.85 " Nitrogen.

0.5408 ÷ 0.2040 = 2.65 " Oxygen.

This alkaloid is identical with a base that I isolated from the evacuations of patients suffering with typhoid fever. I am satisfied that this alkaloid is produced by the action of typhoid bacillus upon nitrogenous

matter. This base was first isolated by Brieger, and he named it typho-toxine. Five centigrams of the chloride, given to a dog weighing thirty-five pounds, produced dilatation of the pupils, with increased frequency but feeble heart action; the temperature sank, the respirations became more frequent, the extremities grew cold, the dog had frequent diarrhetic evacuations, and death resulted from heart failure. Upon autopsy the walls of the intestines were found to be firmly contracted and pale.

LOUISVILLE.

TIERSCH'S METHOD OF SKIN-GRAFTING AS APPLIED TO THE TREATMENT OF INDOLENT ULCERS.*

BY JAMES WEIR, M. D.

The blackest *bete noir*, which probably more frequently than any other lesion darkens the success of the general practitioner's daily work, is the "old, indolent, gray, or weeping ulcer," the *ulcus non exedens* of the older writers.

All doctors have had them in practice, and all have wished more than once that either himself or the patient had never crossed over into this vale of tears. In the course of time, as you call to mind the many times you have dressed the sore, the many times you have met with almost success, and then "thus far shalt thou go and no farther." Even when you recall complete success, and then a breaking down of the skin and a re-establishment of the old trouble in all of its malignant deviltry—in the course of time you become possessed of a peculiar illusion. You confound man with ulcer; when you look on him you do not see eyes, nose, mouth, etc., which go to make up a face, but you see a glistening, smooth surface, glassy in aspect, over which thin and watery tears course down as though weeping for its own unsightliness. Here and there, perhaps, you find this surface covered with green, fetid, and turbid tears, shed at the deaths of countless infant granulations, too weak and marasmic to live beyond the

* Read before the Owensboro Medical Society, November 19, 1889.

moment of their inception. When the sore is large, this appearance is generally found near its lower margin. The indolent ulcer is ever ready to slough. Some constitutional cause or disturbance, any general derangement of the health, or the part affected held for any length of time in a dependent position will produce sloughing. But not a healthy slough; not a slough through inflammation, but through lack of vitality in the granulations themselves. There are as many ways of treating indolent ulcer as there are names to the sore itself. But I believe (and my belief is based on both bitter and pleasing experience) there is but one correct method of treating these ulcers, and that is by Tiersch's method of skin-grafting. I have caused to heal many ulcers by the use of pressure, and at one time I thought the rubber bandage was all that these cases required.

Strips of linen sheeting moistened in water and applied to the ulcer, and over this the flannel roller, is a very efficacious dressing, especially where the ulcer is due to malnutrition or varicose veins. Dusting the sore with iodoform, and then applying the common cotton or calico roller, answers admirably sometimes. But, after you have healed the sore, what can you promise the patient? After days of toil and trouble, after alternations of hope and despair, after great care and vexation of spirit, you have brought the case to a successful termination. Can you promise the patient immunity? No! for in eight cases out of a dozen, where the sore has been of long standing and is due to varicosity, alcoholism, or malnutrition, the ulcer will return. Where Tiersch's method of skin-grafting is done, the sore rarely if ever returns. The reason for this is self-evident. We cover the sore at once with strong, healthy, and old skin, and when the operation is a success there can be no breaking down of the tissues. Then, too, this method of treating ulcers saves time, suffering, and money. The first *desideratum* one must possess to perform Tiersch's method successfully is to secure a healthy field on which to plant the grafts. This is done

by securing a slough. Where the base of the ulcer is not indurated, you can get this artificially by scraping out the ulcer with Volkmann's spoon. Where the base is indurated, there are several ways of securing a slough. The favorite method is to cut completely around the margin of the ulcer, and then make a crucial incision through its base. A poultice should then be applied, and renewed daily until the slough comes away. On the fifth or sixth day a healthy granulating surface on which to plant the grafts will present itself. *En parenthesi*, let me say that last winter I resorted to an original method to procure a slough. The ulcer was on the calf of the leg, some four inches long by two inches broad. I introduced setons of silk-worm gut, not catgut, through its base, from side to side, at intervals of one quarter of an inch. I directed that these should be moved backward and forward night and morning. In five days' time I had a beautiful granulating bed, and, strange to say, without having given very much pain to the patient. I have performed skin grafting (Tiersch's method) twice. Both cases were successful; the first case only after the second attempt. This result was due, probably, to my inexperience and to the lack of antiseptic precautions. The second patient was a colored sleeping-car porter who had an indolent ulcer of several years' standing on his shin. This operation was remarkably successful. The dressings were removed on the fourth day. The grafts had adhered firmly, with the exception of a place at the lower margin, about the size of a silver five-cent piece, where the graft had sloughed away. This operation was done in Knoxville last March. I had a letter from the man a week or two since, consulting me about something else, in which he incidentally remarked that he had had no further trouble with his leg. Some of you may not have had an opportunity of seeing this operation, so I will take the liberty of describing it: We will presume that the ulcer has been made ready for the grafts; that a pan of salt water (moderately salt), temperature, 100° F., is sitting on a table by your side, and that the patient has been

anesthetized. The thigh is bared—if you select it as the point from which you wish to get the grafts—then thoroughly soaped and shaved. Then the skin should be washed with a bichloride-of-mercury solution, 1 in 5,000, and afterward cleansed with ether sulph. Your assistant, standing at the side of the patient and fronting you, places a band on each side of the thigh, and stretches the skin. You then take a sharp, thin razor, and cut the grafts an inch broad, and as long as necessary, dropping them as fast as cut into the basin of salt water. You may take two or more, if necessary, to cover the sore. They are to be applied to the surface of ulcer, straightened out (for the skin has a tendency to roll together) and then dusted over with iodoform. Then comes the dressing of iodoform gauze, bichloride-of-mercury gauze, rubber protective, and finally the bandage. The surface from which the skin has been taken should be dusted with iodoform, and dressed with a dry dressing. It heals in a day or so without a scar. I should state that all bleeding must have ceased, and the blood removed with a soft sponge, when scraping with the spoon is resorted to before applying the grafts. In a healthy, granulating sore, I merely wash off the surface with a bichloride donche, 1 in 5,000. In conclusion, let me say that this is an operation that calls for the strictest antiseptic precautions, and the surgeon often meets with failure where success is due, on account of neglecting the simple rules laid down for the warding off of sepsis.

OWENSBORO, KY.

TWO CASES OF ABSCESS.

BY A. S. M'CLANAHAN, M. D.

Having recently treated two cases of deep-seated abscess, I beg leave to call attention to some points in the management of them:

CASE 1. Male, aged thirty, had been strong and healthy until within a few months of taking his bed. When first seen he was suffering with a distended bladder, supposed to have been due to enlarged prostate. The retention of urine was relieved by the soft catheter.

At this time he called attention to his legs, and complained that they felt weak and benumbed; when told to draw them up, he did so with great difficulty. The bladder trouble persisted for several days, which necessitated the use of the catheter frequently.

At each visit paraplegic symptoms were noticeably increasing, and in time he lost entirely the use of his legs, but no symptoms had yet appeared to account for it. On a subsequent visit, however, while emptying his bladder with the catheter, I noticed that the urine, hitherto clean, had changed to a milky color, and that the last coming out was of a creamy consistency, which was evidently pus.

This discharge of pus increased in quantity and continued for several days. There was absolutely no evidence of caries of the spine, and so I supposed the case to be one of ordinary psoas abscess emptying itself through the walls of the bladder.

The patient had daily exacerbations of temperature, and the general symptoms soon assumed a typhoid character.

The treatment consisted in daily irrigation of the bladder through a double-current catheter with a solution of cor. chloride mercury; tonics and restorative remedies were given internally.

Under the treatment the pus perceptibly decreased daily, and finally ceased. The temperature became normal, appetite improved, and though convalescence was very slow the patient recovered, with the perfect use of his legs restored.

CASE 2. A young girl had a large tumor on the outer aspect of the thigh, extending from the great trochanter down to the upper portion of the lower third; it was soft and fluctuating, and had first been noticed three years before, since which time it had gradually increased in size.

The patient was of strumous diathesis, with glandular enlargement about the neck, blepharitis and ulcers upon the cornea. Her general health was feeble.

In this case there was no curvature of the spine, but tenderness about the middle of the dorsal region.

Treatment consisted in emptying the abscess by the aspirator, great care being used to prevent

air entering the cavity. After this it was thoroughly washed out with a weak solution of bichloride of mercury; later a solution of carbolic acid was used, and finally sweet oil was thrown into the now perfectly clean cavity.

This treatment was carried out three times, at intervals of about three weeks; at the end of about six or seven weeks all fluctuation had disappeared, and no enlargement remained except the induration due to adhesive inflammation, which gradually subsided.

The patient was at the first put upon a tonic, and restorative line of treatment.

Believing that spinal symptoms would eventually appear, I applied the "paper jacket," under the use of which and of tonics all strumous symptoms subsided, the spine regained its strength, and now the patient is perfectly recovered.

I believe that in these large abscesses it is unwise to admit air into the cavity, since its presence seems to set up in the walls a condition which favors the absorption of purulent matter. By the exclusion of air and by the use of antiseptics the danger of pyemia is reduced to the minimum.

MCKENZIE, TENN.

Societies.

LOUISVILLE SURGICAL SOCIETY.

Stated Meeting, January 13, 1890, J. M. Mathews, M. D., Vice-President, in the chair.

Dr. Mathews presented an anomalous case of rectal trouble. At a meeting of the American Medical Association Dr. Goodell reported a series of cases of nervous or hysterical rectum. The speaker had himself read a paper on this topic before the Mississippi Valley Medical Association in 1889. Besides the cases reported in these two papers Dr. Mathews had seen six cases that did not strictly come under this head. He read passages from Goodell's article, an important point being that during and after defecation the patient has severe pain in the rectum. Rectal diseases may be classed under three heads: (1) Hysteria. (2) Reflexes. (3) Lesion or pathological change at seat of trouble.

About four years ago the patient, a lady

of twenty-four years, had pain in the bladder with frequent micturition. This gradually changed until the rectum became the seat of the pain. This pain is not aggravated by defecation, and it may come on at any time or at any place. She is compelled to empty her bladder five or six times during the night. Her physician had used nitrate of silver, carbolic acid, and nitric acid locally without benefit. The patient had used cold applications with benefit. Another physician tied a so-called pile without benefit. The patient came here for treatment seven weeks ago. Dr. Mathews divulsed the sphincter and waited. No good resulted. The bowel looked healthy—seemed to be absolutely normal. Thinking the trouble might be reflex, he dilated the cervix uteri, and later the urethra. No good resulted. The bladder was searched for stone. No stone was found. Five days ago he prescribed a suppository composed of $\frac{1}{3}$ grain morphine, $\frac{1}{2}$ grain of cocaine, and $\frac{1}{2}$ grain of belladonna. For forty-eight hours she has had no pain at all, except that on her way to this meeting she was frightened and had the pain until she arrived here. Dr. Mathews' diagnosis is neuralgia of the rectum. The lady has come one thousand miles for help. What shall be done?

Dr. Ap Morgan Vance thinks it possible that it is a spinal trouble (congestion). Similar cases affecting other parts occur in general surgical practice. He has seen a patient wearing a splint for supposed hip disease who had simply congestion of the lower part of the spinal cord. Under proper treatment the fancied hip trouble disappeared. In another case a boy was relieved of symptoms of hip-joint disease, osteo-myelitis, etc., by a fly blister over the lumbar region. Such cases are common enough. He would advise a very hot spinal donche.

Dr. A. M. Cartledge agreed with Dr. Vance as to the probable origin of the trouble. Another hypothesis is simple neuralgia. He would try quinine and arsenic, galvanism, and later faradism, along with counter-irritation over the spine.

Dr. John G. Cecil thinks the symptoms

point to the bladder rather than to the rectum; thinks it possible that there may be a bladder trouble without its being located. There might be villous growth in the bladder.

Dr. I. N. Bloom believes that the symptoms showed that the nerves going to the bladder are those chiefly involved. This points either to inflammation or congestion of a ganglion or several ganglia of the sympathetic, from which filaments go to the bladder and rectum; but, as suggested by Dr. Vanee, a congestion of the lower spine should be considered in treatment.

Dr. W. L. Rodman thinks with Dr. Vance and advises actual cauterization of the spine. Dr. Rodman would advise in addition that the bladder be examined by the cystoscope, and the urine examined. If nothing was discovered, he would say the trouble was spinal.

Dr. Mathews, closing discussion, said he had seen six such cases. His second case was the wife of a planter, who came here for treatment. He promised relief by stretching the sphincter. Dr. Marvin cauterized her back for two weeks without any result. Dr. Mathews related the fact that Dr. Bloom had chloroformed a patient for him in fifteen seconds—patient a full-grown man who weighed 220 pounds.

Dr. Cheatham exhibited the use of the electrical light, in demonstration of fluid in the antrum, upon a patient present. The left side of the face lighted up, while only the floor of the antrum lighted up on the right side, showing fluid in cavity of right side.

E. R. PALMER, M. D.,
Secretary.

Reviews and Bibliography.

Transactions of the Gynecological Society of Boston. New Series. Vol. I. 396 pp. Boston: Cupples & Hurd. 1889.

The Gynecological Society of Boston has for many years done work in which the whole country takes pride. The volume before us is not likely to take rank below those that have gone before.

The introduction is supplied by a thoughtful address by the president, Dr. Horace C. White, and is followed by a radical plea

against the production of abortion, by Dr. Kelly, under any circumstances. The argument exhibits the special pleadings characteristic of middle-age scholasticism, and might have been made shorter by the averment of an infallible mandate from the See of Rome, as that idea evidently underlies the whole question in the mind of Dr. Kelly. Drs. Symington Brown and E. W. Cushing, in the discussion which follows, sustain very properly the dignity of the profession, and its right, infinitely greater than any church authority, to decide upon the ethics of medical questions.

Dr. Cushing, however, admits that the Catholics will have the majority in a generation or two, as far as New England is concerned, since the Catholic birth-rate is about six to one of the Protestant.

Next follows an orthodox article on the treatment of constipation. The only criticism to make is that the author divides treatment into three parts—(1) attention to the regular evacuation of the bowels, (2) purgatives, (3) enemata—instead of having the treatment to correspond to Demosthenes' notion of eloquence, in giving "first action, second action, third action." The others are of course not to be dispensed with, but they are a comparative by-play.

Dr. Cushing follows with an article on the relation of bacteria to puerperal inflammations, commending cleanliness and non-interference in the treatment of healthy puerpera, and vigorous antiseptic irrigation of vagina and womb in cases of inflammation. Dr. Cushing, however, commends the washing out of the vagina with antiseptic solutions immediately after labor, and the uterus also if an operation has been performed. In ordinary practice, however, the propriety even of this is to us more than doubtful. Strict cleanliness during the labor and the careful removal of every particle of membranes, and then the constant removal of all discharges as soon as they have passed the vulva, we can not but think the fulfillment of the attendant's duty unless inflammation sets in. If pus forms, it of course must be removed.

Dr. Augustus P. Clarke follows with a paper on the advantages of rapid dilatation of the cervix for the cure of dysmenorrhea and flexions. Unfortunately for the doctor's paper it contains the history of no failures.

Dr. C. W. Stevens tells of the marvels of bichloride internally in puerperal fever, erysipelas, etc., and makes us wonder at the ado men make about douching, irrigation, etc., when a little bichloride internally so completely distances them all.

Dr. W. Symington Brown gives a favorable experience in the treatment of chronic cystitis in women by injections and the internal use of a solution of benzoic acid and borate of soda, combined with rest and diluents.

Dr. Helen L. Betts makes a superb appeal for reform in the dress of women, painting in bold colors its malign relation to the etiology and treatment of pelvic disease.

The ever-industrious Dr. H. O. Marcy contributes two valuable essays, one on the perineum, and the other on bacteria in parturition, in which he takes the most advanced antiseptic ground.

In the discussion of a paper, Cancer of the Breast, by Dr. J. Collins Warren, was elicited a statement of great value by Dr. Irish, viz., that in excision of the breast for cancer in only three per cent does the disease recur in the axilla. If such statistics represent the true state of things, the removal of the axillary glands, unless evidently involved, must certainly cause a far greater loss than saving of life.

After several other valuable papers, the volume closes with one by Dr. R. Cyrene McDonald, who takes the ground that the most thorough cleanliness on the part of the physician and that of the patient, as far as attainable, is the limit of prudent efforts in the avoidance of puerperal infection, except that he uses hot water vaginal douches in instrumental cases.

A restful feature of the discussions is the failure to bring up even once the subject of laparotomy, which has long enough had a monopoly of attention. If one should judge by the overshadowing importance accorded

this question, he would conclude that the position of pneumonia and consumption in mortality reports had been usurped by ovarian neuralgia and salpingitis, and that the same burden that once rested on a young Comanche to prove his manhood by the possession of a captured pony or a pale-face scalp now demands that the young surgeon shall carve his way through some woman's abdominal walls to the possession of his knightly spurs. D. T. S.

A Treatise on Materia Medica, Pharmacy, and Therapeutics. By JOHN V. SHOEMAKER, A. M., M. D., and JOHN AULDE, M. D. In two volumes. Vol. I. 353 pp. Price, cloth, \$2.50; sheep, \$3.25. Philadelphia: F. A. Davis. 1889.

Perhaps no task in medical book making presents to contemplation greater difficulties than the preparation of a treatise on therapeutics that shall measure out to every reputed remedy for disease its proper share of merit.

If therapeutics were a matter of pure science, and not complicated with an art which promises the highest reward to the greatest faith, the task would be far lighter. In that case, where a number of competent observers differed under closely similar or identical conditions, the evidence of all would be laid aside, and only that taken wherein there was substantial agreement. But, as the matter stands, the fairest views that are offered, with even tolerable support, must almost of necessity be promulgated by him who would catch the professional ear. The authors of the work before us seem to have taken a middle ground, though leaning, we think, somewhat more to the art than the science. The arrangement of the work is original and different from any that we have met, and in addition to other means adopted to facilitate learning and aid the memory they have adopted the old style of indicating the emphatic terms, not by means of italics, but of heavy letters in black type. The language used all through is that of men who feel that they are addressing students. While both these features detract from the value of the work in our estima-

tion, they may be of advantage for the class of readers for whom it seems to have been prepared. A more careful consideration of the physiological actions of medicines might have been given, but as regards their therapeutic action we would rather commend the pruning-hook than the grafting knife. If the second volume shall come up to the standard of the first, we can cheerfully commend the work as a fairly safe guide and a valuable addition to our therapeutic literature.

D. T. S.

Diseases of Women: A Manual of Non-Surgical Gynecology, designed especially for the use of Students and General Practitioners. By F. H. DAVENPORT, A. B., M. D., Assistant in Gynecology, Harvard Medical School. With numerous illustrations. 311 pp. Price, \$1.50. Philadelphia: Lea Brothers & Co. 1889.

The aim of the author of this work is to give the student clearly the elementary principles of the methods of examination, and the simple forms of treatment of the most common diseases of the pelvic organs on the one hand, and to help the busy general practitioner to understand and treat the gynecological cases which he meets with in the course of his every-day practice on the other. All surgical gynecology, except such simple procedures as demand no special skill, have been omitted. The author does well to explain that the work is designed not for a text-book but as collateral reading; for a man whose knowledge of gynecology is limited to what is to be gained from these pages could hardly be excused for attempting to treat female diseases to any extent. For the object especially set forth, however, it can not but prove of value.

D. T. S.

Diphtheria: Its Nature and Treatment. By C. E. BILLINGTON, M. D.; and **Intubation in Croup**, and other Acute and Chronic forms of Stenosis of the Larynx. By JOSEPH O'DWYER, M. D. New York: William Wood & Co. 1889.

This book devotes three hundred and eight pages of clearly printed matter to the thorough consideration of the above subjects, with an appendix, giving the late investigations of

M. Roux and Gersin in the Pasteur Institute regarding the diphtheria bacillus of Klebs and Loeffler. M. Roux and Gersin have for the first time succeeded in producing diphtheritic paralysis experimentally in animals.

The body of the work, by C. E. Billington, M. D., considers diphtheria in all its phases, and its treatment, in the most thorough manner. Dr. Billington's classification of the disease in its different forms, and his division of the different treatments, make the book one of very great interest and importance to both the student and the busy practitioner. The book is very compact and very concise.

Joseph O'Dwyer, M. D., in his part on Intubation brings the subject up to date. His article gives a very valuable ending to the exceedingly interesting volume.

W. C.

Practical Electricity in Medicine and Surgery.

By G. W. OVERALL, M. D., of Memphis, Tenn. 130 pp. Press of Memphis Printing Company. 1890.

The author follows a brief discussion of the nature of electricity, and a description of various forms of battery, by a history of results obtained by him in the treatment of various forms of disease by electricity. While avowedly conservative, endeavoring to avoid skepticism on the one hand and over-confidence on the other, the majority of the profession would set him down as an enthusiast.

D. T. S.

Diabetes: Its Cause and Permanent Cure, from the Standpoint of Experience and Scientific Investigation. By EMIL SCHNEE, M. D., of Carlsbad. Translated from the German by R. L. TAFEL, A. M., Ph. D. English edition, revised and enlarged by the author. 215 pp. Price, \$2. Philadelphia: P. Blakiston, Son & Co. 1889.

The enthusiastic author of this work claims to have discovered the cause of diabetes, which he is sure consists of hereditary syphilis—possibly from some remote ancestor—and its cure, which consists exclusively in diet. Sugars and farinaceous foods are rejected, while nearly every thing else is allowed, provided attention is given to thorough mastication and insalivation. By this

method he professes, in bold capitals, to have cured hundreds of cases. All this apparently at Carlsbad.

It is not easy to see how the work of Dr. Schnee can be improved upon, unless the appeals made to newly arrived patients at our own Hot Springs should be gathered into book form.

D. T. S.

Foods for the Fat: A treatise on Corpulency and a Dietary for its Cure. By NATHANIEL EDWARD DAVIES, Member of the Royal College of Surgeons, England. American edition. Edited by CHARLES W. GREEN, M. A., M. D. 138 pp. Price, 75 cents. Philadelphia: J. B. Lippincott & Company. 1889.

This work devotes thirty-nine pages to such questions as the effects of corpulency; the amount of food required; the uses of food and its ultimate elimination; the uses of fat in the body; amount of food and kind to be consumed; the use of stimulants and water; while the remaining eighty pages are taken up with rules for the preparation of dishes. In short, in addition to being quite a satisfactory treatise on obesity, it supplies the requirements for a very excellent cook book. Indeed, so well has the task been performed that if corpulence has to be transformed into leanness through all these toothsome dishes the fat man is rather to be envied than pitied.

D. T. S.

(1) **Education and Culture**, as related to the Health and Diseases of Women. By ALEX. J. C. SKENE, M. D. 127 pp. Detroit, Mich: George S. Davis. 1889.

(2) **Diabetes Mellitus and Insipidus**. By ANDREW H. SMITH, M. D. 70 pp. This volume with No. II forms part of The Physician's Leisure Library.

No. 1, by A. J. C. Skene, contains much valuable thought on the proper education of women, but its style is not what might have been expected from its eminent author, showing as it does much evidence of hasty composition.

No. 2 gives, in a succinct form and clear style, what is most generally approved in regard to the nature and treatment of dia-

betes mellitus and insipidus. It is one of the most valuable compends of the two diseases embraced by it that we have anywhere seen.

D. T. S.

Essay on Medical Pneumatology. A Physiological, Clinical, and Therapeutic Investigation of the Gases. By J. N. DEMARQUAY, of Paris. Translated with notes, additions, and omissions, by SAMUEL S. WALLIAN, A. M., M. D. Illustrated with fine wood engravings. 300 pp. Cloth, \$2.00; half Russia, \$3.00.

This neatly gotten up work gives an interesting history of the successive and varied attempts that have been made in the past to cure disease by different gases, and a report of the author's experience and observation in this method of treatment. Whoever leans to gases can here find, most likely, all he wants, especially in the way of encouragement. The average reader will, however, conclude that the author is much led astray by his zeal, or that there is much suffering in the world that is without excuse while there is so great an abundance of oxygen.

D. T. S.

Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

A new antiseptic, brought forward by Sir J. Lister lately at the Medical Society of London, is made, it appears, from a double cyanide of mercury and potassium, to which a soluble salt of zinc is added. The precipitate must be very carefully washed in order to get rid of all soluble cyanides which cause irritation and suppuration if placed on a wound; 1 part in 2,000 of this agent prevents putrefaction. To prepare with this the antiseptic gauze used for dressings, the double cyanide of mercury and zinc is triturated with starch, and water is added to this, the result being a leather-like mass. The water is strained off, and to the mixture sulphate of potash is added. It can then be easily powdered, and when dry is a fine, white powder. To fix it on gauze, 3 to 5 per cent of it is suspended in a 1 to 4,000 solution

of corrosive sublimate, when, by the agency of the starch, it adheres firmly, and can only be washed off with difficulty. The dressings are used moist.

A practical test of the value, or rather non-value of the corset has at last been made. Mrs. (Dr.) Bryant gives an account of an athletic contest which has taken place at the North London Collegiate School for girls between wearers and non-wearers of the much discussed corset. With a view to obtaining scientific data on disputed points sixteen pupils, wearers of corsets, were arrayed against sixteen "abstainers." The trial included a high leap, a long leap, tug of war, and running competition. In leaping, neither side gained any signal advantage over the other. In the tug of war, for which the girls had been well drilled, the "abstainers" had far the best of the fight, and twice dragged their opponents over the line. For "endurance running" the object desired was to test the evidence of disturbance, as shown in an increased pulse, increased respiration, and diminished breathing capacity. The results showed a small advantage to the corset party in the matter of respiration rates, and a considerable advantage to the opposite side in pulse rate. But the most striking results were obtained from the tests for breathing capacity. While the effort of running diminished the breathing capacity of the corset-wearers by 0.8 cubic inches, that of the non-corsets was increased by 4.4.

Dr. Hill, in speaking of aural complications in acute specific fevers, says that in pertussis, measles, and pneumonia, when the inflammation spreads up the eustachian tube, the otitis can often be prevented and nearly always limited or arrested to the non-suppurative variety by appropriate nasopharyngeal and inflation treatment. If neglected, suppuration of the middle ear results from tubal obstruction and accumulation and retention of tympanic secretion. The tendency to this acute suppurative stage is more marked when the middle ear becomes involved in scarlet fever, diphtheria, and smallpox, and if unrelieved by immediate

incision of the membrane on the outset of the pain or evidence of intra-tympanic accumulations, the destructive processes above alluded to result, the labyrinth frequently also being involved. Should the pain remain unrelieved upon establishing proper drainage, together with frequent syringing of the meatus with antiseptic lotions, and inflation by the tube, the application of leeches or incision for mastoid inflammation, and of Leiber's continuous cold coil for less limited pain is recommended. Dr. Hill mentioned that the mere relief of pain often lulled to false security, while irreparable destruction was going on in the delicate auditory organ. With regard to general treatment, salicine and quinine were contra-indicated, while the most useful and important drugs were iodide of sodium and subcutaneous injections of pilocarpine.

The "Leprosy Fund" dinner, which took place in the magnificent hall of the Hotel Metropole, his Royal Highness (the Prince of Wales) in the chair, was a distinct success, owing in part to the active exertions of the secretary, Sir Somers Vine. The gathering, which was short of its proper number through the absence of many sufferers from influenza, included a remarkable array of men of learning and science; the leading surgeons and physicians were in great force. There were only four toasts, and equal praise may be given to the addresses of the Prince of Wales and the presidents of the Royal Colleges of Physicians and Surgeons. The young lady referred to by the Prince of Wales, who is going out to Molokai to work among the lepers there, is Miss Amy C. Fowler, daughter of the Rev. F. W. Fowler, Chaplain of the Bath Union Workhouse. She is twenty-seven years of age, and formed the idea of devoting her life to this object some seven years ago, after joining the Roman Catholic Church. She has studied in Paris, and is a disciple of Pasteur. She will be the matron of Father Damien's hospital, at Kalawao, and will be known as Sister Rose Gertrude.

The influenza has made a decided impression upon the death-rate. In his weekly

report for the second week in January, the Registrar General states that no fewer than 2,747 deaths were registered in London, or 810 more than the average for the corresponding weeks of the last ten years. The death-rate per thousand, 21.8, 20.3, and 28.0, in the three preceding weeks, rose during the week to 32.4. This was the highest rate recorded in any week since December, 1873, and the sixth week of 1882, when under the influence of continued fog and cold the rate rose to 46.7 per thousand. During the past week as many as 67 deaths were primarily attributed to influenza. This was apart from cases in which influenza was stated only as a secondary cause, while the deaths referred to diseases of the respiratory organs exceeded the corrected average by 522.

In his work just published, and entitled "Clinical and Chemical Observations on Plumbism," Dr. Brown says the blue line on the gums caused by the lead sulphide is formed by the sulpho-cyanide of potassium which is constantly present in the saliva, the sulphur of which may form sulphureted hydrogen under the action of nascent hydrogen gas, produced by using butyric and other fermentations in the mouth. Besides colic and wrist-drop, the author has observed epilepsy and convulsions, frontal headache, mania, melancholia, general paralysis, absence of patella tendon reflex, muscular tremors and atrophy, and insomnia as results of lead-poisoning.

At an inquest recently, the coroner arrived late, and, having kept the jury waiting for a considerable time, he promptly fined himself in the sum of one guinea, which was forwarded as a contribution to the funds of a local hospital.

Lady Verney has presented to the Aylesbury Infirmary a bust of her sister, Florence Nightingale, the heroine of the Crimean campaign. It is a cast taken from Sir John Steele's well-known work, which was subscribed for by the British army and forwarded to Miss Nightingale's father.

Mr. Peter Reid is the donor of the munificent sum of £100,000 for the purpose of

founding a convalescent home in connection with one or two metropolitan hospitals. Mr. Reid has for many years taken an active interest in several hospitals and charitable institutions.

LONDON, January, 1890.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Although the epidemic of influenza which has been raging in Paris since the beginning of last December may be considered almost at an end, yet it may interest your readers to have a short history of its course, which I have extracted from the transactions of the Academy of Medicine and of the different learned societies of Paris. The affection known under this name, or, as it is also termed, *la grippe* in French, is not of recent origin, as it had already been described in the fourteenth and fifteenth centuries, although under different names, such as *le dardo*, *le lac*, and *le norion*. In 1730 it was called *la synoque catarrhale*; in 1762 it was called *la follette*. It was *la grenade* of 1779, and *l'influenza* of 1837. It is more than half a century since Trousseau, of Paris, and Gubian, of Lyons, recognized the fact that the epidemic of 1837 presented two distinct periods; the one simple and slight, the other more intense, enervating, and recrudescing, diversely complicated with pneumonia, pleurisy, neuralgia, intense fever, etc. About the same time Dr. Girelli, of Brescia, observing the suddenness and the vivacity of the reigning pandemic, which, he said, affected every part of the organism, considered influenza as a superficial and specific inflammation of the serous membranes of the peritoneum and of the meninges, of the muscular aponeuroses, also of the naso-pharyngeal and tracheo-bronchial membranes. The epidemic of 1889 and 1890 is looked upon as the same affection, as has been seen at certain recent autopsies. The eruptions which made some practitioners believe that we had to do with the dengue fever were noticed in former epidemics, and particularly in that of 1776. Bastard, typhoid, or infectious pneumonias were noticed as having been very frequent

in 1779, 1837, and latterly in 1886, at Paris. Valleriola described them in 1557, and the epidemiologist Baillou, a Parisian, devoted a remarkable study to them in 1570-71. Is pneumonia a manifestation of influenza, or is it one of its complications? To this the answer, according to the majority of writers on the subject, is, that it is neither one nor the other, that the influenza merely prepares a bed for pneumonia in subjects predisposed.

As regards the generalization of the epidemic there have been some striking examples. For instance, in 1847 the entire universe was struck in a few months. In 1850 all Spain was affected with the influenza on the same day, the rich as well as the poor; no class was spared. Since Hippocrates, it is known that it is the easterly winds which habitually coincide with the epidemic catarrhal constitutions. This fact was corroborated by John Huxam, the English author of one of the best descriptions of influenza given in the last century. In 1837 the savants attributed the epidemic to meteoric, and even sidereal influences, of which the easterly wind was the least obscure. It would appear that we scarcely know much more respecting the causes of the present epidemic. It is, however, the manifestation of 1837 which remarkably approaches that of the present one. The description given by Sandras and Landouzy on *la grippe* at the Hôtel Dieu in January and February, 1837, affords a striking example of this analogy, rarity or absence of maladies several months before the epidemic. The sanitary condition was perfect when at the commencement of 1837 the tickets for admission to the hospital bore the diagnoses of pains, lassitude, catarrhal fever, etc. The same thing happened in 1889. The extreme moderation of the mortality during the whole time of the Exhibition surpassed the most optimistic provisions. In a few days from the 10th of December the hospitals were crowded.

In 1837 the same thing occurred, and such a number of persons stricken at the same time was never before known, even during the memorable cholera of 1832. The follow-

ing were the most marked symptoms noticed by Sandras in 1837: extreme lassitude, soreness of the limbs, violent cephalalgia, vomiting, and tendency to syncope. The patients said that they felt as if they had been beaten with a stick. The greater number incapable of standing on their legs, which were almost paralyzed, were obliged to have recourse to stretchers to be conveyed to the hospital. Their physiognomy expressed stupor; they complained of a total loss of appetite and of sleep; they also felt a catching pain in the sides of the chest and cramps in the muscles. The abdominal form of *grippe* was rarely observed, as also in the present epidemic. Phthisis was ordinarily but not always aggravated by the influenza. Thus it may be seen that the morbid sketch is the same now as it was fifty-three years ago. Even the convalescence and the probable date of cure were also difficult to decide. The treatment adopted by our ancestors in medicine seemed quite rational, and would have been more usefully carried out now instead of hunting after so-called specifics. In 1864, Carrière, remarking the analogy of influenza with intermittent fever, recommended the use of the sulphate of quinine. The preparations of cinchona bark he thought were not only the best curative remedies, but they were also the most powerful engines of prevention against the epidemic of catarrhal fever. Teissier had also shown, in a remarkable memoir, that the preparations of aconite, while not responding evidently to all the indications of a malady so complicated as is influenza, singularly diminish this sensation of general prostration which sometimes lasts several weeks, and even several months. When the expectoration was difficult, a mixture composed of the acetate of ammonia in an infusion of polygala was administered, or in some cases a vomipurgative was prescribed. During the present epidemic ipecacuanha and opium in combination were also freely employed by the older physicians, and Dr. Alison, of Baccarat, advises the employment of etherized tannin, two drams per day in three wafers, to be taken imme-

diately after meals. This medication, he observed, sensibly shortened the duration of the *grippe* and of its convalescence.

The following note in connection with this subject may be found of interest. Dr. Renvers, of Berlin, considers that the influenza belongs to the series of epidemic maladies the most anciently known and of the most frequent occurrence. The epidemic habitually lasts from four to six weeks. The disease affects each sex, every age, and every class. It is not influenced by geographical, climatic, or meteorological conditions. It is considered to be an infectious malady, but the infectious agent is unknown. The prognosis has, till now, been particularly favorable, these cases never ending fatally.

PARIS, January 24, 1890.

Abstracts and Selections.

SOME RECENT ADDITIONS TO THE MATERIA MEDICA.—Among the new drugs which Messrs. Parke, Davis & Co. announce they can supply are the following:

Cocillana. Guarea (species undetermined). Synonym: *Sycocarpus Rusbyi*, Britton. Part employed: The bark. Natural order: Anacardiaceæ. Habitat: Bolivia. Properties: Expecto- rant, tonic, laxative. This new remedy possesses a sphere of influence on the respiratory organs somewhat similar to ipecac., but said to be "superior in certain diseases of the air-passages in which the latter is often used." (Dr. D. D. Stewart in Medical News, August 24, 1889.) Besides its excellence as an expecto- rant, clinical experience has also established the fact that it exerts a tonic influence upon the appetite, and that it reduces the night sweats of chronic bronchitis and phthisis. *Cocillana* also gives promise of usefulness as a laxative. Dose, 10 to 30 minims (0.6 to 2 c.c.)

Eschscholtzia. (*Eschscholtzia Californica*, Cham.) Synonym: *Californica poppy*. Part employed: The whole plant. Natural order: Papaveraceæ. Habitat: California. Properties: "An excellent soporific and analgesic, and above all harmless." Recent analysis claims to have discovered the presence of a minute quantity of morphine in the plant. The quantity contained, however, is not sufficient to account for all the therapeutic effects, and further chemical

investigation promises to isolate another active principle which may better explain its action. The drug is a very useful anodyne in certain cases. The inconveniences attributed to the use of opium, such as stomach disturbance, constipation, etc., have not, in any case, been observed in its use. It may with advantage replace opium preparations for children. Fluid extract of the plant. Dose, 15 to 30 minims (1 to 2 c.c.).

Jatropha. (*Jatropha macrorrhiza*, Benth) Synonyms: *Jicama*, *Jicomia*, Span. Part employed: The root. Natural order: Euphorbiaceæ. Habitat: Northern Mexico and Southern States adjoining. Properties: Alterative and cholagogue; in larger dose hydro-cathartic and sometimes emetic. *Jatropha macrorrhiza*, a household remedy of the Mexicans, has been recently recommended for use in this country by Dr. A. H. Noon, on account of its comparative tastelessness; the slight taste the drug possesses being compared to that of the sweet-potato. It has been suggested that as an addition to non-cathartic, but otherwise astringent mixtures, its use could not be otherwise than valuable. Clinical experience will doubtless develop other and more specific indications for its employment. Fluid extract of the root. Dose, $\frac{1}{2}$ to 2 fluid drams (2 to 8 c.c.).

Echinacea. (*Echinacea angustifolia*, De.) Synonym: Black Sampson. Part employed: The root. Natural order: Compositæ. Habitat: Western United States. Properties: Very strong claims have been recently made for this drug as an alterative of great value in all strumous and syphilitic indications. Old chronic wounds, such as fever sores, old ulcers, etc., have yielded to its use after resisting potassium iodide, sarsaparilla, yellow dock, etc. It is also stated to be an infallible remedy in the treatment of blood-poisoning, of snake-bites, and as a prophylactic and also curative agent in hydrophobia. Fluid extract of the root: Dose, $\frac{1}{4}$ to $\frac{1}{2}$ fluid dram (1 to 2 c.c.).

Hydrastinine. A new derivative of Hydrastine—a possible substitute for ergot. This substance, an oxidation product of hydrastine, white alkaloid of golden seal, has recently been prepared by us in order to afford opportunities for physiological investigation in European laboratories, prominent among which are those of the universities of Dorpat and Berlin. It can be obtained from hydrastine by the action of various oxidizing agents, and though the original methods were attended with considerable

waste, improvements in this respect are constantly being made. So far the most troublesome element is encountered in its purification and crystallization. The reaction taking place in its production may be illustrated thus: Hydrastine, $C_{21}H_{21}$, No. 6; Hydrastinine, $C_{11}H_{11}$, No. 2; Opianic acid, $C_{10}H_{10}$, No. 5. The alkaloid or base being sparingly soluble, and moreover rather prone to decomposition when in solution, we have given preference to the hydrochlorate as possessing the desirable elements of stability and solubility in aqueous fluids. Recent advices from the highest European authorities represent it to be of immeasurable service in controlling uterine hemorrhages, far surpassing ergot in efficiency, certainty of action, and safety.

Broom-corn Seed. (*Andropogon Sorghum*: Brot.) Synonyms: *Sorghum saccharatum*, Pers. *Sorg. vulgare*, Pers. Part employed: The seed. Natural order: Gramineæ. Habitat: Sub-tropical; distribution, extensively cultivated. Properties: Diuretic, sedative, demulcent, and soothing to the irritated urinary organs in vesical catarrh, cystitis, and irritable bladder. In the aged, who are compelled to rise frequently at night to void their urine, it has produced great relief. It must not be confounded with broom-top or scoparius. Dose of fluid extract of the seeds: 1 fluid dram (4 c.c.) three to five times daily.

Among other products this house has recently introduced may be mentioned the following:

Compound Sulphur Lozenges, Acetanilid Tablets, Soluble Elastic Capsules of Quinine Muriate. They are headquarters also for selected pressed herbs which they guarantee to be superior to any others in the market.

ELECTROLYSIS IN URETHRAL STRICTURE.—For the successful carrying out of this treatment much time and patience are necessary. The few failures I have seen have really been due to impatience. When, in a sitting, no progress is apparent after a few minutes, an increased current is turned on, and considerable force used to get the electrode through. Can one be surprised if, under these circumstances, a false passage is made, hemorrhage and urinary fever ensue, and the treatment is cast aside as worthless?

Experience has taught me to limit this method to strictures of the deep urethra, and in these, of whatever variety, it is almost always successful. When I say successful I mean that the same result is attained as when an internal urethrotomy has been performed, namely, the lumen of the stricture has probably been enlarged to 22

Fr., and for the maintenance of which the passage of a bougie at stated intervals is absolutely necessary. I have not the same proportion of cures to record which Mr. Bruce Clarke claims to have obtained for in only one of my cases has an absolute cure resulted, by which I mean that no tendency to recontraction remains, although all instrumentation has been given up for, say, six months. Mr. Clarke says that, "Of fifty cases, twenty-three were known to be well after periods varying from one and one half to three years." What does he mean to imply by "well"? If he means that such a one is restored to comfortable micturition, and can maintain this state by passing his bougie at intervals, I can well believe him; but this, of course, is very different from what one usually understands as being well. I have almost entirely limited electrolysis to the treatment of resilient and severe cases of stricture, using it as a substitute for urethrotomy. In this way I have during the past year treated, among others, two medical men, both of whom are loud in its praise and have unbounded confidence in it. In this respect I have been more fortunate than my colleague Mr. Reginald Harrison.

It is, I think, an important point in cases of multiple stricture, and one which I always endeavor to carry out, namely, to deal with those in the penile urethra, either by cutting or dilatation, before applying the electrode to the deep urethra. One is often surprised to find how much benefit has occurred to a deep-seated stricture after free division of a meatal or other anterior one, thus clearly demonstrating its, at all events, partly spasmodic character, a point on which much stress is laid by Otis. To this element of spasm the good effect of electrolysis is no doubt greatly due.

In the Medical Press of April 11, 1888, I published a paper on this subject, and subsequent experience has only confirmed the good opinion I then expressed of it when limited to subpubic strictures.

Before closing these remarks, I would add that this form of treatment is of much benefit in many cases of perineal pain and other urethral neuroses. I am at the present time treating a gentleman, the subject of stricture, for which he has twice undergone internal urethrotomy, in whom the passage of a bougie is always followed by much genital excitement, and which so annoys him that he has often been tempted to neglect treatment. Since undergoing electrolysis (he has had nine or ten sittings) he is no longer troubled in this way, and his

stricture has been dilated from No. 12 to No. 24, French gauge.—*F. Swinford Edwards, British Medical Journal.*

BOXING THE EARS AND ITS RESULTS.—We would fain hope that, in deference to repeated warnings from various quarters, the injurious practice of boxing the ears, once common in schools, is fast and surely becoming obsolete. It is too much to say that this desirable end has yet been realized. Certainly the recent observations of Mr. W. H. R. Stewart do not give color to any such view. In a pamphlet on "Boxing the Ears and its Results," lately published and illustrated by appropriate cases, he briefly summarizes his own experience in the matter. He there reminds us that, notwithstanding the toughness of the aural drumhead, its tense expanse will rupture only too readily under the sudden impact of air driven inward along the meatus, as it is in the act of cuffing; and he shows that in one instance at least this injury resulted from a very slight though sudden blow. Given early and skilled attention, the wound may heal very kindly, but if the beginning of mischief be overlooked, as it often has been, further signs of inflammation soon follow, and a deaf and suppurating tympanum is the result. There is practical wisdom in the statement that this consequence most readily follows in the case of the poorly developed and underfed children who abound in every board school. In them an earache would probably receive no very strict attention, and disease might for a time work havoc unimpeded. Where chronic suppuration exists already, and it is only too common, a random knock on the ear may result, as in a case related in the *Lancet* in a fresh otitis, with fatal brain complications. Schoolmasters and others, who may at times be tempted to apply the correcting hand somewhat too carelessly, might read the few pages of this little work with equal interest and advantage. The close connection between ear and brain should never be forgotten, and the reflection that injury to the former organ most easily terminates in total deafness, and in suppuration which may any day take a fatal course, should assist in the preservation of a sometimes difficult patience. *Lancet.*

THE ELECTRICAL TREATMENT OF UTERINE FIBROIDS.—Apostoli attacked the method particularized by MM. Championniere and Davion at the meeting of the French Congress of Surgery. Their method is based on

the employment of currents of moderate intensity, the extra-uterine action, and the reversed action.

He claims the inferiority of this method for various reasons. Their statements are based on seven months' experience and eleven cases, while the method of Apostoli has been established seven years, has received the approval of all who have used it, and includes several thousand observations in France and other countries. They remain surgeons and continue to perform castrations and hysterotomies. They select their cases, using the current in aged women or those but little sick, and operating on the young women. They admit of failures which legitimize their surgical intervention. Their method remains vaginal and extra-uterine, preventing all cure of the accompanying endometritis. With them, the relapses are constant if the treatment is not continued. They do not affirm as to the disposition of the inflammatory deposits. "*La fonction des eaux chloruées sodiques*," which they praise, shows that their method is at fault. They have not proved the evident anatomical reduction of the fibroma.

Apostoli asserts the efficaciousness of his method: Because it has the pretension to suffice in itself, and in most cases to supplant surgery in the treatment of fibroma, it does not require the selection of cases, and all cases are ameliorated, young and old; because failure is the exception in all cases of simple fibroid tumors, not fibrocystic, which are not complicated by ascites, and without puerperal lesions of the annexes; because there is utilized the action of vaginal galvano-punctures, either singly or in conjunction with the intra-uterine action which is necessary for the endometritic lesions; because relapses are the exception, and the greater part of the results remain constant, if the treatment has been sufficiently prolonged; because it embraces with its sphere of action, under formulae of intensity and diverse localization, the treatment of fibroma, that of endometritis and metritis, and of a great number of cases of ovaro-salpingitis; because it can do without an additional treatment, even that of *les eaux chloruées sodiques*; because there has been observed an anatomical reduction of the fibroma, not total but partial. His method is inoffensive and always supportable if the rules are conformed with. The very rare cases of death observed are due, in great measure, to errors in diagnosis, tumors of the appendage mistaken for fibroma and electrically treated.

Apostoli claims the priority and paternity of all medical electrical applications exceeding fifty milliamperes. For two years he has exclusively employed intensities from forty to seventy milliamperes; since that time he has considered it necessary to increase, not in an exclusive and blind manner, as has been stated, but by a rational and progressive method, according to the cases.

The intensity should be moderate in cases of uterine intolerance or peri-uterine affections; the intensity should be increased in all the grave forms complicated by endometritis or by hemorrhage.

Aimé, Martin, and Chroné were the first ones to particularize (1879) the action extra-uterine, either on the neck or on the vagina, and were the first to use the reversals or the interruptions of the galvanic current. Montz Benedict, of Vienna, had also applied the reversed galvanic current before MM. Championniere and Davion. E. S. M.

VOLVULUS AND ITS TREATMENT.—The following conclusions are arrived at by Dr. N. Senn at the close of an interesting paper upon the surgical treatment of volvulus (Medical News, November 30th), in the course of which he deprecates the resort to any such attempts at taxis as those advised by Mr. Hutchinson, and recently published in his "Archives of Surgery." Dr. Senn gives a successful case of volvulus of the sigmoid treated by laparotomy: "(1) The predisposing causes of volvulus are either congenital or acquired, and consist in elongation of certain segments of the intestine, abnormal length of mesentery, and adhesion. (2) Irregular distribution of intestinal contents and violent persistalsis are the most important exciting causes. (3) Volvulus is most frequently met at the sigmoid flexure and the lower portion of the ileum. (4) Secondary volvulus on the proximal side of other forms of intestinal obstruction is not a rare occurrence; it is also frequently developed during an attack of peritonitis. (5) As a rule, the symptoms are more acute and intense if the volvulus is located above the ileocecal region. (6) Vomiting in cases of volvulus of the sigmoid flexure is not a constant symptom. (7) The most important physical sign of volvulus is a circumscribed area of tympanites which corresponds to the location of the volvulus; but this sign is only of value before general tympanitis has set in, and therefore enables the surgeon in many cases to make an early and positive diagnosis. (8) All cases of volvulus should be treated by laparotomy if reposition can not be accomplished by rectal insufflation of hydro-

gen gas. (9) Reposition should not be attempted without evisceration. (10) Evacuation of intestinal contents by a free incision should be practiced in every case where general distension of the intestines is present. (11) Enterectomy becomes necessary if any considerable portion of the intestinal wall has become gangrenous. (12) Irreducible volvulus should be treated by establishing intestinal anastomosis with permanent exclusion of the seat of obstruction from the active fecal circulation. (13) Recurrence of volvulus can and should be guarded against by shortening the mesentery by folding it upon itself parallel to the long axis of the bowel and suturing the apex of the fold to the root of the mesentery."—*Lancet*.

MENSTRUATION AND PSEUDO-MENSTRUATION AFTER DOUBLE OVARIOTOMY AND REMOVAL OF THE UTERINE APPENDAGES.—One of the most interesting phenomena which sometimes follows double ovariectomy, or removal of the uterine appendages, is the persistence of menstruation, or a more or less periodical metro-staxis. This is usually utterly unexpected to the patient, and may cause her to lose her faith in medicine as a science, or in the operator as a successful practitioner. The phenomenon is also of interest to the physician because of the physiological and pathological questions involved. That the occurrence is not very rare may be seen from the fact that statistics seem to show that from five to ten per cent of women who have submitted to double ovariectomy, or the removal of the uterine appendages, afterward go through the phenomena of menstruation or pseudo-menstruation. Wylie gives ten per cent as the number; Battey four cases out of fifty-four.

As to the causes of this persistent bleeding there is a general agreement among operators; and it is attributed either to leaving behind some portion of ovarian tissue, or to certain diseased conditions in the pelvic peritoneum, blood-vessels, and connective tissues, or to disease of the uterus. Theoretically it is possible always to remove the uterine appendages entire, but in practice it is at times exceedingly difficult. Even though the ovary is freed sufficiently to pass the ligature below it, it is sometimes necessary to "scalp" the ovary to leave a stump sufficiently good to prevent the ligature from slipping. Also, in enucleating ovaries densely adherent to the floor of the pelvis, the ovarian tissue is at times torn, and portions are left behind. Besides this, ovarian tissue may remain in the form of

supernumerary ovaries, which exist with sufficient frequency to require consideration.

Menstruation may or may not continue when ovarian tissue is left—this depending largely on the nature of the blood-supply to the ovarian tissue.

Hegar states that incomplete extirpation of the ovaries and the presence of a third ovary are less frequently the cause of recurring hemorrhages following operation than is generally believed. A greater influence is exerted by vascular dilatations, stasis, and hyperemia of the pelvis, such as are often present before operation or may develop later. More pronounced pathological processes, such as inflammation of the pedicle, ligaments, other parts of the pelvic peritoneum, and connective tissue, and tuberculosis, produce periodical or irregular hemorrhages, partly by a direct influence on the circulation, partly by nervous agency. Ols-hausen agrees substantially with this view, but considers that the most frequent cause of pseudo-menstruation after operation is the persistence of pelvic inflammation, especially if more acute inflammation or abscesses develop.

Persistent uterine hemorrhage is at times due to uterine disease, such as adenoid growths in the endometrium, fibroid tumors—especially of the submucous variety—polypi, or malignant degeneration.

Several practical conclusions are to be drawn from these well ascertained facts. As it is by no means positive that the complete menopause will be established after double ovariectomy or the removal of the uterine appendages, patients undergoing such operations—or certainly near friends of the patients—should be told so plainly. Under existing circumstances the operator should feel only relatively disappointed when a complete menopause does not result after the double operation, and should set himself diligently to work to cure the particular morbid condition which is causing pelvic and uterine congestion. In the exceptional cases, in which the ovaries have not been entirely removed, or in which supernumerary ovaries exist, and true menstruation continues, a second operation and excision of the remaining ovarian tissue may be necessary. Also, when infection of the pedicle causes abscess about the ligature, it may be necessary to evacuate the pus and remove the ligature by secondary abdominal section. More commonly, in cases which have been drained, pus is discharged through the drainage track until the ligature comes away or is removed. Pus formation about the liga-

ture does not occur so frequently in cases which have not been drained, largely for the reason that death is likely to take place in these cases from sepsis or peritonitis before abscess results. Where the recurring metrostaxis is due to uterine disease, thorough curetting of the endometrium may suffice to cure it. When malignant degeneration of the womb exists, hysterectomy or excision of the degenerated tissues is indicated.—*Medical and Surgical Reporter*.

PSOROSPERMIA (COCCIDIA) IN MAN.—As will be seen from the report on another page, a large part of the time of the last meeting of the Pathological Society was occupied by the description of certain parasites which, although remarkably prevalent in some of the lower animals, notably the rabbit, have not been much recognized in the human subject. Indeed, the specimen shown by Mr. Bland Sutton suggested the notion that possibly its presence has been overlooked in many cases, for his specimen was obtained from the Middlesex Hospital Museum, where it had been mounted as an example of mucous cysts of the ureter. Mr. Sutton, however, correctly surmised the parasitic nature of this curious specimen, for on recently submitting the "cysts" to microscopical examination he found that they were really occasioned by the presence of psorospermia or coccidia, of which Leuckart has written so able an account. Of equal interest were the communications by Mr. Silcock and Dr. Delépine, the former dealing with a case in the human subject where these parasites were found in the liver and spleen, and to the presence of which it was supposed that the obscure febrile symptoms were due; while the latter gave a most careful account of the disease in the rabbit. Dr. Payne's remarks deserve consideration, for, referring especially to the peculiar bodies characteristic of molluscum contagiosum, and lately alleged to be psorospermial in nature, he pointed out the difficulty of distinguishing them from colloidal masses derived from cell degeneration. Moreover, Mr. Sutton admitted that it was possible to mistake the ova of some entozoa worms for psorospermia. Nevertheless the attention thus given to the subject is sure to bear fruit; and without admitting it to be conclusively proved that these minute animal parasites are responsible for eczema of the nipple or molluscum contagiosum, the question of their gaining entrance into the human body, and being there a source of danger to health and even of life, is too important to be lost sight of. The "gregariniæ" are perhaps the most widely diffused of all animal parasites, since they infest insects and

other invertebrates, and their occurrence in man has hardly hitherto been seriously regarded. But they at once assume a most important position if they are to become responsible for tissue changes of a grave kind. The subject, however, from this point of view, is still in its infancy, and no good result will accrue from premature generalization on the few data at present forthcoming.—*Lancet*.

PROLAPSUS RECTI DUE TO STONE IN THE BLADDER.—At the last meeting of the American Pediatric Society (see Transactions, January, 1889), Dr. A. Caillé, of New York, reported the case of a female child, three and one half years old, with the following history: About one year before presentation the child's gut was found prolapsed after each stool, and she appeared to be in great pain in passing her urine. She was taken to a number of physicians and dispensaries for treatment, and presented at almost all the clinics as a case of inveterate and severe prolapsus recti, and many methods of treatment were tried without affording the child the slightest relief or improvement. At his first examination Dr. Caillé found the child to be anemic, nervous, and cachectic in appearance, and suffering from diarrhea and bronchitis. The rectum was prolapsed two inches, and during the examination it came down fully seven inches and presented a slightly bleeding surface. A straining effort on the part of the child forced urine from the bladder, which was collected and found to contain pus and much epithelium, as evidence of cystitis. The sphincter ani was relaxed to such an extent that three fingers could be passed through it without an effort. The child was then anesthetized, and a more careful examination showed the presence of a large stone, free, in the cavity of the bladder.

Speedy removal of the stone was suggested, and the supra-pubic operation decided upon, on account of the large size stone and the facility of access by this operation. The bladder was first thoroughly irrigated with a warm solution of boro-salicylic acid, and, after division of the skin in the linea alba, the patient was put in Trendelenburg's position, with head low and raised pelvis, by which means it was comparatively easy to avoid the reflection of the peritoneum. It was not found necessary to raise the bladder by inflating the rectum, two fingers of an assistant passed into the rectum being sufficient to bring bladder and stone into a convenient position above the symphysis. The bladder was now incised and the large stone

removed with some difficulty, thereby producing slight laceration of the margin of the incised bladder.

Owing to this slight and unavoidable laceration primary union was not contemplated, but the bladder was sutured, nevertheless, and the wound filled with loose iodoform gauze, and the usual antiseptic dressing applied. The temperature of the patient was normal throughout the entire healing process, except on the third day after operation, when it rose to 102° F. for a few hours. The process of healing was all that could be desired, excepting a small leak in the suture, which was detected on the fourth day. At the end of three weeks the wound had closed and the child was discharged cured.

During the time of convalescence the rectum came down once, and not again afterward. The stone was twice as large as a pigeon's egg, and weighed twenty grains. Its presence in the bladder of the child had evidently caused the rectum to prolapse as a direct consequence of frequent straining, and its removal permitted the parts to assume their normal and natural condition.

CAUSE OF DEATH FROM ELECTRIC DISCHARGE.—The deaths which have recently occurred in New York from electric discharge, and the *post-mortem* examinations made on those fatally stricken, have led to the conclusion that in the course of the electric current through the body the blood is the chief conductor. This is precisely what has been known in this country since the year 1869, when Dr. B. W. Richardson conducted his series of experiments on death by electric shock with the large electric coil set up by Mr. Apps at the Royal Polytechnic Institution. In those researches the experimenter, by passing electric currents of high tension through sets of glass tubes charged with different conducting animal substances, made the fact demonstrable that of all the animal structures blood was preferentially by far the best conductor. In the same researches it was also demonstrated, (1) That discharges which by their intensity kill most rapidly leave least mark of distortion or of external injury; (2) that on complete prostration from the shock the heart may continue in action for several minutes after what appears to be actual death; (3) that the injuries inflicted on a living body by the shock are superficial burns and ecchymosed spots on the outer surface of the body, darkening of the color of the blood within the body, congestion of the heart and venous system generally, and injection, in some instances, of the mucous surface of the alimentary canal. The

conclusion arrived at from these observations in regard to the cause of death from the electric shock was that the cause is a sudden expansion of the gases of the blood, with liberation of free gases from instant decomposition of the blood and the other fluids. Under the tension produced from the internal gaseous pressure, distension occurred in the venous canals, and the escape of bubbles of gas from the cavity of the cranium, on laying it open, was a frequent phenomenon. In one instance the right side of the heart of a sheep was ruptured from the cause named on the administration of the shock. But it was also observed in other instances that the whole of the discharge seemed to be conducted solely by the external surface of the body, under which condition there was extreme shock and prostration without death. It was this last observation that led Dr. Richardson to discard the idea of utilizing the electric shock for the painless extinction of the lives of the inferior animals, and to substitute the lethal chamber for that humane purpose.—*Lancet*.

LEPROSY IN SPAIN.—Dr. José E. Olavide, of Madrid, the well-known Spanish dermatologist, has recently published some particulars of leprosy as it is found in Spain at the present day. His remarks apply solely to Spain proper, neither the Spanish colonies, the Canaries, nor the Philippine Islands being included in the scope of his paper. He says that there are always from six to eight lepers in the Hospitals de San Juan de Dios at Madrid, who have come there from some of the infected districts; they remain in the hospital till their death, as according to recent legal enactments, they are not allowed to leave. In no case have these sufferers communicated the disease either to the other patients among whom they live, or to nurses or medical attendants, nor has Dr. Olavide, during twenty-five years of practice, seen any evidence of the transmission of leprosy by contagion. He adds that of the five hundred lepers whom he has had under his care during that period, only one attributed his disease to that source. It should be noted that Dr. Olavide is not an anti-contagionist; he accepts the bacillary origin of leprosy without reserve, and thinks, to use his own words, that the disease "ought to be contagious and inoculable." So far, however, neither clinical observation nor experiment has, in his experience, furnished any evidence in confirmation of this *a priori* view. Leprosy is rare in the inland districts of Spain, and is chiefly found in the provinces of Almeria, Murcia, and Granada on the south coast, and in Galicia and Asturias on the north coast. The disease is not known

to exist in the Basque provinces, or in that of Santander, although there is free communication between these parts and America, the Malay Archipelago, Australasia, and Polynesia. It is a curious fact that in the maritime provinces, where leprosy is indigenous, it is not found so much on the coast itself as at a distance of some leagues from it. According to Dr. Olavide, the only inland provinces in which there are a few foci of leprosy are Jaén, Cordova, and Guadalajara, and in these most of the sufferers are missionaries or soldiers who have been in America or the Philippine Islands. The former generally attribute the disease to bad food, and the latter to intercourse with native women. In cases that have not been imported from abroad, the disease is looked upon in Spain as hereditary. Two or three years ago it was proposed by the government that an official census of lepers should be taken, but the project fell through, owing to difficulties of diagnosis, which Dr. Olavide attributes to the want of instruction in dermatology in Spanish medical schools. He estimates the total number of lepers in Spain at the present time as from 1,000 to 1,500. Dr. Olavide concludes by urging on all governments the propriety of sending commissions of microscopists and dermatologists to study the disease in the West Indies, China, and the Philippine Islands, and of having exact statistics drawn up of the number of lepers in Europe and the colonies.—*British Medical Journal*.

THE EARLIEST PHYSICAL SIGNS OF PHTHISIS.—The extreme difficulty and the urgent importance of a definite diagnosis of phthisis at the earliest possible period are universally acknowledged. Both with a view to either calming or confirming the patient's fears, and of insisting upon such an alteration of the mode of life and such remedial measures as offer the best prospect of arresting the tubercular process, an early and confident diagnosis is eminently desirable. Hence Dr. Harris' recent contribution to the subject in our columns has no doubt received the careful attention of our readers. On some of his points there will be general agreement. That a history of hemoptysis, especially of repeated slight hemorrhages, is of great significance, no one will question. If we can certainly exclude the spurious forms of hemoptysis, such as those from the gums and pharynx, and if the patient be not a "bleeder," the fact that he has repeatedly spat blood raises a very strong presumption that he is the subject of tuberculosis. That family history is also very important, most authorities, in this country at

least, will allow. There is at present a tendency among continental writers, who are usually adherents of the bacillary and contagionist view of phthisis, to minimize the hereditary factor in its causation; but this is probably only a temporary swing of the pendulum, the clinical evidence that phthisis is strongly transmitted being apparently irrefragable.

It is when we come to define the earliest positive physical signs of phthisis that we find it difficult to lay down any rules that do not admit of large exceptions. Dr. Harris attaches weight to impaired movement at one or both apices, and no doubt when present this is very important. It may be recognized, not by simple inspection, but by the examiner standing behind the patient, placing his hands upon the subclavicular region of each side, and noting whether both sides rise equally and readily during inspiration, or whether there is, at it were, a delayed rise on one side. Dr. Harris points out another sign which, he says, has not received in this country the attention which it deserves. This sign is the lower limit of pulmonary resonance in the supra-clavicular and supra-scapular regions on the affected as compared with the sound side, which may be detected in cases where no dullness is present. This sign may, however, be obliterated by the presence of emphysema in the neighborhood of the diseased patch of lung. Any dullness or tonelessness on percussion at one apex must, in a doubtful case, be regarded as of great significance.

The auscultatory signs present at a very early stage of phthisis offer great variety, and need a very careful estimate to determine their true significance. In some cases where, on general grounds, the diagnosis of phthisis seems practically certain, the most careful and diligent auscultation fails to detect any abnormality. This is by no means so surprising as at first sight it appears to be. We know that it is not very rare for all auscultatory signs to be absent during the first two or three days of pneumonia, although we feel certain that consolidation is going on. This is very probably explained by the hypothesis that in such cases the process is deep-seated in the lung, and that the sounds produced by the consolidation are masked by the normal vesicular murmur. In like manner, early phthisis may be attended by a scanty deposit of tubercles, not sufficiently superficial to produce auscultatory signs which can be heard above the normal breath sounds.

Great importance must be attached to the character of the breathing in these cases. If the vesicular murmur be feeble, or somewhat harsh or bronchial in quality, or if expiration be much prolonged, we are justified, in the absence of any other cause adequate to produce these signs, in regarding them as probably tubercular in origin. It is of the first importance, however, to make certain that these signs are present, either solely, or at least in a more marked degree, on one side. The puerile breathing of children and the somewhat bronchial breathing normally present under the right clavicle are fruitful sources of error with beginners. Dr. Harris utters a caution against relying too much upon prolonged expiration, if no other sign be present; and no doubt it is insufficient of itself to warrant any safe inference. That peculiar form of interrupted breathing, called by French writers *respiration saccadée*, was formerly generally relied upon as a sign of some value in early phthisis, but probably most authorities will now admit that this phenomenon is often of neuro-muscular origin, and can not therefore be depended upon to give us any satisfactory indications of the condition of the lungs.

Adventitious sounds form the last group of the physical signs of early phthisis. There can be no doubt that they vary much from day to day, which is not surprising when we reflect that they owe their origin to the varying degree of bronchial catarrh present in the neighborhood of the tubercular deposit. The supra-scapular region should be as carefully investigated as the subclavicular, as many observers are of opinion that it is, on the average, the earliest seat of the deposit. The most characteristic adventitious sign of the earliest stage is the presence of a few dry crepitations, which do not disappear on taking deep breaths and are rather accentuated by coughing. There are cases, however, in which the earliest adventitious sign is a musical r le or rhonchus, identical acoustically with that heard in bronchitis, but deriving its grave significance from its distribution. Pleuritic friction may also be one of the earliest signs of phthisis, and if apical in distribution should excite our suspicion. As regards the diagnosis value of the presence of the bacillus in the sputum, we are in this position. Its presence is pathognomonic of tubercle, but failure to find it is of very little value, as the bacilli may be few in number and may escape detection, even at the hands of a careful observer.

On the whole, while the ear diagnosis of phthisis is admittedly difficult, few mistakes will be made by the practitioner who balances signs, symptoms, and history (personal and family) carefully and guardedly, and who does not allow himself to be led astray by any single indication. Needless to say, finally, the use of the thermometer is imperative, and may serve to clear up many doubtful cases.—*Lancet*.

TREATMENT OF GOITRE BY INTERSTITIAL INJECTIONS OF TINCTURE OF IODINE.—Several years ago, Luton, of Rheims, proposed the treatment of goitre by the intra-parenchymatous injections of undiluted tincture of iodine. This method was afterward adopted and commended by Prof. A. Lücke, and by Duguet; the latter has published a memoir on the subject, in which he has reported numerous successes.

Terrillon, surgeon to the Salpêtrière, has published, in the *Bulletin Général de Thérapeutique*, a communication in which he advises the iodine injections in bronchocele as more likely to give curative results than those of tincture of iron or of ergotin, counseled by former surgeons; and he gives minute directions how to carry out this treatment successfully.

In order properly to practice this injection, says Terrillon, there are three points indispensable to know :

1. The operator must be sure that he has penetrated the substance of the tumor before pushing the injection.

2. He must avoid, as far as possible, transfixing the veins which ramify in the cellular tissue in front of the neck. In fat patients the veins are not very apparent, and it is desirable before inserting the needle to find a place where no veins shall be in the way. The patient should be made to take a full breath, during which the swollen jugulars become prominent, and they can then be very easily avoided.

3. The third important point is to have a hypodermic syringe that is perfectly clean, in order to avoid the introduction of infectious germs. Terrillon recommends that the syringe with its needle should be left a certain time in boiling water before being used.

After having taken these precautions to obtain asepsis of the instrument, and after having chosen the place to make the injection, the operator takes the needle and plunges it slowly but without hesitation into the hypertrophied thyroid body. To avoid the infiltration of liquid in the cellu-

lar tissue of the neck, it is necessary to insert the needle to the depth of at least two or three centimeters, and to be assured by the movements impressed on the tumor and by the feel of the needle, that the latter has penetrated the glandular substance. Having introduced the needle deep into the thyroid body, the surgeon unscrews and removes the syringe before making the injection, in order to see whether any blood flows by the canula. This precaution is needful in order to avoid the injection of iodine into the interior of a vein. If blood should flow at the point of puncture, another place is chosen, and the same maneuver is repeated.

After being assured that a vein has not been pricked, the syringe is readjusted, and half a gram of pure tincture of iodine is injected into the tumor. If this injection is well supported, if the patient experiences no other symptoms than a slight pain with a little swelling, the next time a whole syringe-full is injected. After having made the injection and introduced the desired quantity of liquid into the tumor, the needle is not immediately removed, but is left a few seconds, in order that the liquid may be sufficiently diffused into the parenchyma of the gland, and that it may not flow into the subcutaneous cellular tissue.

Terrillon recommends to make but one injection at a time, and to have four or five days' interval between the injections, in order to guard against the danger of iodism. A little pain immediately after the operation at the site of the puncture, followed by shooting pains into the back of the neck, the lower jaw, or even the shoulder, should not give alarm, as these pains are rarely of long duration. Sometimes the patients taste iodine in the mouth after the injection, due to the elimination of iodine in the saliva. A little swelling follows the injection; this rarely goes on to suppuration.

Cases have been recorded where goitre has been benefited and even cured by one injection of tincture of iodine. Ordinarily the injections have to be repeated several times, and sometimes as many as twenty are required to bring down the thyroid body to its normal volume. At the point where the iodine is injected there takes place a destruction of the tissue elements, which undergo fatty transformation, and end in being absorbed. The irritation of the tissues causes the formation of a point of cicatricial tissue, which in undergoing retraction little by little produces shrinkage of the tumor. The injection of iodine acts, then,

by provoking the fibrous transformation of the goitre. A sufficient number of injections must be made so that all points of the thyroid body may be brought under the influence of the medicinal agent. In this way complete atrophy of the morbid growth is eventually obtained.

Terrillon believes that the tincture of iodine constitutes the most efficacious treatment of goitre. At the same time, other irritant liquids may be injected into the thyroid body, such as a ten per cent solution of iodoform in ether. This acts in the same way, by provoking a non-suppurative inflammation of the tumor. Fowler's solution has been employed, but this is toxic, and can with safety only be injected by drops. Moreover, it is not so certain in its action as iodine; and the same may be said of ergotin, which was formerly much used in parenchymatous injections from the supposed power to cure atrophy of the hypertrophied gland-elements by lessening the blood supply.—*Boston Medical and Surgical Journal*.

THE TREATMENT OF INFLUENZA.—M. H. Huchard, writing in the *Revue Gén. de Clin. et de Thérap.* (December 12th), speaks of nervous prostration as being a chief clinical characteristic of severe cases of influenza, requiring for its treatment quinine, alcohol, and, in bad cases, even injections of caffeine and ether. Quinine, he says, is indicated on account of the markedly remittent type of fever, and to moderate the evening exacerbation it suffices to give a full dose (5 to 15 grains) of the sulphate or hydrobromate in the morning. Smaller doses more frequently taken are useful for their tonic rather than antipyretic effect. In neuralgic or rheumatoid form of influenza antipyrine (15 grains) combined with bicarbonate of soda ($7\frac{1}{2}$ grains) is recommended by M. Huchard, to be taken every four hours, or, instead of antipyrin, phenacetin salol (7 grains). Influenza often assumes a broncho-pulmonary form, and in certain cases is very grave. In the epidemic of "la grippe" in 1886, recorded by M. Menetrier, the pneumonic forms were very asthenic. In such cases, tonics, milk, alcohol, and, in fact, general restorative measures are indicated rather than local applications to the chest. If the dyspnea becomes severe, and the condition termed by Graves "pulmonary paralysis" ensues, then strychnia is of value; or in case of impending asphyxia or renal asthma, venesection; but when the asthenia itself threatens life,

there should be no hesitation at resorting to hypodermic injections of ether, and especially of caffeine. For the gastro-intestinal form, mild aperients, ipecacuanha, and the use of salicylates of bismuth or of magnesia, naphthol, or iodoform to promote intestinal antiseptics, are indicated.—*Lancet*.

A NEW SOURCE OF HYOSCYAMINE.—A rhizome which has recently been offered in the drug market as a substitute for belladonna root under the name of "belladonna scopolia" has been very fully investigated in the research laboratory of the Pharmaceutical Society. At the last meeting of the Pharmaceutical Society Professor Dunstan communicated the results of a chemical examination of the drug, which shows that it contains 0.5 per cent of hyoscyamine. With the possible exception of a mere trace of hyoscyne, no other mydriatic alkaloid was found in the plant, which would seem by this circumstance to be distinguished from other plants belonging to the same natural order, viz., belladonna, hyoscyamus, scamonine, etc., from which different proportions of atropine or hyoscyne are present in addition to hyoscyamine. Professor Dunstan points out, however, that this difference may possibly be due to the methods employed by previous workers in extracting the alkaloids from these plants, which may have led to the decomposition of the hyoscyamine by heat or by fixed alkalis. Among the other compounds isolated from the new drug were a crystalline sugar resembling dextrose, a fluorescent substance, and cholesterin. The latter substance is present to the extent of 0.1 per cent, and it was subsequently found to be contained in the root of *Atropa belladonna*. The resemblance between the two plants is borne out by a comparison of the structures of the roots, which has been made by Mr. Grenish. The rhizome was referred to Mr. Holmes for identification, and he states that it is derived from *Scopola carniolica*, a plant which grows apparently abundantly in Austro-Hungary and in other parts of Europe. The pharmacy of the drug is fully described in a paper by Mr. Ransom. The therapeutic action of preparations made from rhizome was the subject of a communication from Sir Dyce Duckworth, who shows that the drug may be used with success as a substitute for belladonna, apparently with the advantage that it does not give rise to the dryness of the throat which is produced by belladonna. Further trials of its therapeutic action are being made. Since

Scopolia carniolica contains more alkaloid than belladonna, is easily obtainable, and is at present cheaper than that drug, and moreover furnishes a valuable source of hyoscyamine, it is probable that more will be heard of its employment in medicine. The papers to which we have referred are printed in the *Pharmaceutical Journal* of December 14th.

THE MICROBE.—The microscopic germ or microbe of to-day, or the old time entity, has assumed an important rôle in our lives. Of late years a flood of light has been thrown on the subject of germs by the work of M. Pasteur, his researches in ferments and fermentation, and his extraordinary findings in chicken cholera, charbon, and hydrophobia. These have attracted the attention of the medical and lay world, and have been the means of leading to endless investigation in every clime.

To-day, thanks to such researches, upward of two hundred germs, microbes, or bacteria are known, the majority wholly harmless as disease-producers—in a word, most useful in the many physiological processes taking place within our bodies.

While trying to establish the *raison d'être* of some of these microbes, a new one is announced that temporarily promises to be king. The new *bé-en ire* is influenza, doubtless due to a specific organism wafted through the atmosphere to our circulation. In common with other microbes, "like produces like." This influenza bacillus is an old-time globe trotter. Its antiquity makes it intensely respectable and correspondingly annoying. He hails from the land of the unknown—the East. The Russians attribute it to the Chinese. Certain it is, from St. Petersburg it has spread all over Europe and, instead of continuing a harmless course, seems to have taken on virulence in its travels, and now is said to be death-dealing. Doubtless thousands of eyes scientific are watching for the "little stranger."

The conclusion that "like produces like" is an unalterable law in di-ease and nature. What practitioner would expect a patient with small-pox to cause scarlet fever, or one with the latter to produce puerperal fever in another? What agriculturist planting corn would expect wheat? "Like produces like."

Does vaccine produce scarlet fever or measles? Or has it through long decades simply produced the usual effects of vaccination in all ages and climes? Here a new thought intrudes itself. The result of a successful vaccination is a scab or crust, a scar, and subsequent immunity from small-pox. How many of our readers have paused and attempted to reason out the exact *modus operandi* of vaccine within

the system? What does it do in the body? Does the scientist live who in a few well-chosen words can explain that action, or is our reasoning anent it empirical as it is on other equally important questions in disease? What does the cow-pox or humanized vaccine do in our life currents—they that alike distribute nourishments and disease to our tissues, and eliminate effete products? That a successful vaccination exerts a specific influence on the blood, we accept. Do the entities in the vaccinal fluid set up a fermentation within, as evidenced by the often great systemic disturbance, flushed face, rapid pulse, and high temperature? Then follows a gradual subsidence of the disturbance, and the irritative effects of the poison pass away. The septicemia, or whatever you may be pleased to call it, is over, and protection against small-pox becomes an accepted fact. We know that for long years the serum of the vaccine vesicle was not supposed to be particulate; but thanks to the investigations of Dr. Lionel, Mr. Beale Godlee, and others in England, we now know that it is particulate and full of moving entities. Further, that if vaccine serum be filtered the fluid that passes through the filter, if used on new-born children, produces no effect; but that if the filtrate be used, the usual characteristic effects follow.

The vast field of bacteriology at present offers some of the grandest problems to faithful workers. Patient investigators should be accorded the largest measure of patience and fair play. The truly vital problems will only reveal themselves to the faithful workers. On our part it must be patience and charity in their crucial and incessant research.

And apropos of inoculations, the press of the country has again referred to the inoculations practiced at Rio de Janeiro, stating that the city council of that city has been so favorably impressed by their ascertained value as protecting against yellow fever, that six hundred dollars a month has been voted for vaccinal establishments. To us at a distance, it seems that the reasoning of Dr. Domingos Freire, of Rio de Janeiro, Brazil, Dr. L. Girerd, late of Panama, and Drs. Carlos Findlay and Celgado, of Havana, is sound and based on the reasoning applied to vaccination. From a case of specific yellow fever blood is taken from the finger and a culture is made. The attenuated culture is used for inoculating. Natural result, a mild yellow fever, or planting corn that they may get corn, to use a homely simile. Dr. L. Girerd, while in that hot bed of yellow fever, Panama, inoculated himself and produced a mild yellow fever. In December, 1886, the *Canada Medical Record* published a translation of his paper. In Havana, Cuba, Dr. Carlos

Findlay repeatedly has inoculated new arrivals with the happiest results, that is, subsequent immunity in that hot-bed of yellow fever. Again "like produces like." That the blood of a patient suffering from specific yellow fever must be full of its poison goes without saying. In attenuating it, by cultures made *à la Pasteur*, the gentlemen named have worked on accepted lines. They are well-known writers and investigators, as native and foreign medical literature testifies. They have fixed on certain germs or microbes which, from their constancy in their cultures, they believe to be the specific germ. Many years ago, during a limited epidemic of yellow fever at Southampton, England, Dr. Hassell, of that city, detected an unknown germ or entity in the blood of his patients. Ziemssen refers to it. But be that as it may, from the blood of yellow fever patients the poison of the disease is obtained.

To repeat, time, patience and investigation will clear up the minor details; the great ones seem to be indisputable. That yellow fever is due to an entity or germ all students of yellow fever accept. The year 1890 should show great strides in bacteriology and preventive medicine, and the unfolding of many of nature's secrets. Let scientists work, resting assured that time will do justice to all, and that medical science will place her laurels where they belong.—*Journal American Medical Association*.

INTERTRIGO.—Intertrigo, or chafed skin, is such a common affection that it is generally overlooked, except, perhaps, the application of any available salve. Yet it is often painful, and may under certain circumstances result in eczema. Again, the application of unmedicated ointments may do considerable harm by increasing the superficial inflammation and becoming rancid. A simple and most efficacious salve is the following, which we quote from the *Journal de Méd.*, November 10, 1889 (Med. and Surg. Reporter):

Acid borici..... gr. viij;
Lanolini..... 3 jss;
Vasellini..... 3 ijss.

M. et fiat unguentum.

THE URINE IN PERNICIOUS ANEMIA.—In a series of able papers upon this topic (London Practitioner) Dr. William Hunter comes to the following conclusions:

1. The presence of pathological urobilin in great quantity—a coloring matter derived, in all probability, partly from the bile-pigments in the intestinal tract, partly from other products of hemoglobin destruction,

found so abundantly in the liver, spleen, and kidneys in this particular case.

2. The presence of blood-pigment, recognizable on microscopic examination, of whose source there could be no doubt, as it appeared in the urine in the form of granules similar in appearance and character to those afterward found in the cells of certain of the renal tubules.

3. An increased excretion of iron.

All these changes point to the existence of one condition of the blood, namely, an excessive destruction; and they all agree in one respect, namely, that they varied in degree from time to time, the aggravations of weakness from which the patient periodically suffered being marked by higher color of urine, excretion of blood-pigment, and increased excretion of iron.

In addition to this, their pathological significance, these changes are, I am inclined to think, of no little importance from a diagnostic point of view. The high color of the urine observed, unaccompanied as it was by any diminution in quantity or any rise in specific gravity, and the presence of granules of blood-pigment in the urine, pointed so unmistakably to the nature of the pathological process at work in the blood that they established conclusively the diagnosis of the case as one of pernicious anemia.

One must, however, in this connection guard one's self against a misconception that may not improbably arise. The urine in pernicious anemia need not always show these well-marked and, when present, characteristic changes. It may be said, however, with some degree of assurance, that they will be found more or less marked in all cases at some period or other of their history.

In all cases, as in the foregoing one, there will be times corresponding to the periods when the patient is gaining ground, when the color of the urine will be that of health, and nothing abnormal will be microscopically recognizable.

The aggravations of weakness will always, however, be evidenced by a higher color of the urine; it may be also by the appearance of blood-pigment granules in the urine, both changes marking the nature of the process within the blood which is the occasion of these attacks, namely, excessive hemolysis.

In the recognition of this fact as to the nature of this form of anemia, and of the farther fact that, as I have endeavored to show elsewhere, this destruction is initiated

in the portal system, and depends upon changes occurring within the gastro-intestinal tract, is to be found the great indication for that treatment of the disease which will most probably be of value. Having established, as I think these various observations conclusively do, what is the nature of the morbid process within the blood, our next endeavor must be to recognize and combat the changes within the gastro-intestinal tract on which they depend. This subject I hope to deal with in a future paper based on further investigations either already made or still in progress.

PRIMARY TUBERCULAR DISEASE OF THE EYE.—Like all comparatively rare diseases, cases of primary intra ocular tubercle may give rise to considerable doubt in the minds of those under whose care they are, both as regards diagnosis and treatment. In certain instances it is next to impossible to distinguish between tubercular and syphilitic nodular iritis; yet in reference to the adoption of active treatment a correct diagnosis is all-important. Such doubtful cases have been described on several occasions as granuloma of the iris, a name which is said by some authors to signify that the disease is of syphilitic origin, while others hold that it is tubercular. At the best it probably means that our knowledge of such cases is not yet complete. The doubts which arise regarding treatment chiefly concern operative measures. If the disease be tubercular, should the eye be excised, in the hope of removing a center of infection, and thus preventing general tuberculosis? If syphilitic in nature, active anti-syphilitic treatment is indicated, and these measures would but doubtfully conduce to the cure of tubercle. The records of cases seem to point to enucleation as the best treatment for primary intra-ocular tubercle; on the other hand, in a certain number of cases recovery has ensued from disease which had all the clinical characters of tubercular iritis. One point seems fairly well established, viz., that if any operation is undertaken it should be removal of the entire globe; iridectomy performed with the intention of removing the diseased portion of iris has been almost uniformly unsuccessful. *British Medical Journal*.

POISONING BY TINCTURE OF IODINE.—Dr. A. N. Collins, of Detroit, Michigan, reports the following case of poisoning by tincture of iodine. The patient was a young woman of twenty, who was seen fifteen or twenty minutes after the drug had been swallowed. She was found to be suffering from symptoms of acute gastric irritation and burn-

ing of the throat, and was very much frightened. The patient, who had not partaken of food for six hours, stated that she had swallowed half an ounce of tincture of iodine in mistake for her medicine which was standing near it. Dr. Collins gave her a draught of water thickened with starch, followed by a teaspoonful of mustard in water and a copious draught of warm water. Vomiting was immediately produced, the vomited matter having the blue color of iodide of starch. The treatment was repeated until color-change was no longer produced on the starch, and was followed by a hypodermic injection of $\frac{1}{4}$ grain of morphine and $\frac{1}{120}$ grain of atropine. Next day the patient had no trouble beyond epigastric pain and indisposition to take food, and she was soon able to resume her work.

DIAGNOSIS BETWEEN TRUE AND DIPHTHERITIC CROUP.—The following are among the points of contrast between these two diseases, according to Gay, of the Boston City Hospital (*Kansas Med. Journal*):

TRUE CROUP.	DIPHTHERITIC CROUP.
A local disease.	A constitutional disease.
Begins in the larynx.	Begins in the fauces.
Pharynx slightly affected.	Pharynx extensively affected.
Not traceable to local causes.	Often traceable to local causes.
Seldom occurs in adults.	Often occurs in adults.
Neither contagious nor [infectious].	Both contagious and [infectious].
Not epidemic.	Often epidemic.
No affection of lymphatics.	Lymphatics often affected.

CAUTION IN THE USE OF COCAINE.—Dr. C. W. Richardson narrated before the Medical Society of the District of Columbia a case of cocaine-poisoning, for the purpose of directing attention to a novel toxic manifestation of the action of the drug. In attempting to remove from a married woman of twenty-five a cartilaginous spur projecting from the septum into the left nasal cavity, and pressing upon the inferior turbinate bone, he injected a few minims of a ten-per-cent solution of cocaine into the tissue to be removed. In a very short time unquestionably erotic manifestations were observed. The operation was postponed for a few days, when, on again using cocaine sparingly and in a local manner, similar manifestations occurred. "As a strong tendency exists among most practitioners, after they have used a remedy for a long time without its producing any serious or unusual effects, to become careless in its application, the case before us ought to serve to impress the obvious danger which may arise from the incautious or careless administration of this drug."—*Journal of Amer. Med. Association*.

The American Practitioner and News

"NEC TENUI PENNÂ."

Vol. IX. SATURDAY, FEBRUARY 15, 1890. No. 4.

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H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the EDITORS OF THE AMERICAN PRACTITIONER AND NEWS, Louisville, Ky.

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"SANITARIANS AS ALARMISTS."

It is the glory of modern medicine that, under the encouragement of the majority of the profession and the assiduous labors of a few devoted doctors, sanitation has grown to be almost an exact science, and contemplates nothing less than the annihilation of zymotic disease. Thus, under perfect sanitation cholera and yellow fever may be barred out of any given country, typhoid fever may be avoided by any enlightened human being, while the dissemination of tuberculosis among men may be mitigated or prevented by measures so simple that their importance is, therefore, likely to be overlooked. The price which the apostles of Hygiea have had to pay that man might have the priceless boon of immunity of epidemic scourge, while not Promethean, has been sufficiently high. They have been compelled to work against the stolidity of ignorant legislators, the prejudice of ill-informed doctors, the opposition of powerful corporations, the sophistries of pettifoggers, the machinations of municipal rings, and the careless indifference of the people at large; and now a new hindrance to progress confronts them in the belittling criticisms of some learned men.

Thus our esteemed contemporary, the New York Medical Record (8th inst.), after praising the sanitarians in a graceful paragraph, submits their ranks to the following fusillade:

"They are apt to go too far and attempt to prove too much. Men are willing to be scared a little, but they will not allow themselves to be scared too much. They are reasonable also, and are ready to put up with very many inconveniences for the good of the community; but their patience and their faith have limits. When one thing after another is forbidden simply because some sanitarian says that it contains the germs of disease, they begin to doubt. They see that their fathers drank ice-water in moderation and yet lived to a good old age, although they are now told that ice holds many bacteria which only await liberation to work destruction among the sons of men. They have seen people riding in sleeping-cars for many years, but are now informed that it is only at the peril of their health that they ever pass a night in these pest-wagons. They have been accustomed to look upon a sea voyage as health-giving, but are now told that it is almost a miracle if one reaches the shore without having received into his lungs the germs of consumption. It is no wonder that they become incredulous after a time and refuse to accept any advice from the sanitarian, especially if such advice runs counter to their material interests.

"Much, if not most, of the opposition which health officers have to contend against comes from individuals or corporations whose interests are threatened, and the only effectual way of overcoming such opposition is through an appeal to public opinion. Laws are useful and necessary, but they are of comparatively little avail unless backed up by the intelligent approval of the public. We may gain the support of the people by appealing to their reason and common sense, but not by working upon their fears and conjuring up causeless alarms, which their own experience tells them are existent chiefly in the mind of the zealous sanitarian."

Now, it is needless to say that the eminent editor has here allowed the force of his diction to run away with his knowledge of things and his better reason in dealing with the much abused sanitarian. Typhoid fever is certainly produced by a germ which finds its nidus in drinking water, and there is no better conservator of this germ than ice cut from ponds into which houses and their surroundings are drained. There are few cities in America to the inhabitants of which ice cut from suburban ponds is not dispensed to their hurt, and if one case of typhoid fever in the land is thereby engendered, it is reason enough for the outcry of the sanitarian, which should be so loud and so long that it will penetrate the legislative ear and abate the nuisance.

Again, in the matter of palace ships and palace cars it is easy to be facetious at the expense of truth. If there be any thing demonstrated in etiology, it is that the dried sputum of the tuberculous expectorator is the chief agent in the dissemination of phthisis, and none knows better than our learned contemporary that the carpets, tapestries, and cushions of cars, ships, churches, and opera houses are the best possible conservators of the deadly bacillus, while the pavements of most of our city sidewalks, in dry weather, give up a cloud of such germs with every passing foot. These facts are so patent that the physician no longer doubts that the only salvation for those whom heredity renders susceptible to phthisis is to live in solitary and elevated regions where the germs of phthisis have not yet been carried by the victims of the disease.

But the above strictures, whatever they may be to the average doctor and the laity, are a work of supererogation so far as our editor is concerned. And we confidently expect to find him at no distant day upholding the sanitarian in every phase of his good work, which should continue to agitate the public mind until we shall have sleeping cars, passenger ships, churches, theaters, and dwellings which hold no lurking-place for the deadly germ, and until no tuberculous citizen of any civilized commonwealth or

municipality will presume to spit upon highways or on the floors of the houses of the public or of his friends.

Notes and Queries.

ELECTROTHANASIA.—The commercial success which has attended the efforts of engineers to make electric currents of high tension practically useful for lighting and as a source of power has, within the last few years, led to the creation of a new industry. The Institute of Electric Engineers was inaugurated a few weeks ago under the presidency of Sir William Thompson, and its first public meeting was addressed by the Prime Minister, who gave a voice to the vague feeling of admiration with which the public have regarded the engineering achievements of his hearers. For every skilled engineer employed in this new branch of the profession there must be scores of workmen more or less skilled who are constantly employed by the numerous electric light and power companies which have sprung up. How important the industry has already become may be gathered from the fact that the capital of the companies now actually at work in this country exceeds two millions sterling. In the United States, however, the use of electricity has become very much more general. The capital invested in electric companies is said to amount to nearly fourteen millions sterling, supplying over two hundred thousand arc lights, two and a half million incandescent lights, and working three hundred and twenty-nine cars upon fifty-three electrical railways.

One of the inevitable consequences of every industrial advance seems to be the occurrence of new varieties of injuries and disease, resembling other classes with which medicine is already acquainted, but presenting certain peculiarities. The injuries produced in the human body by strong electric currents are not strictly of a new order, for they are of the same kind as those produced by lightning; as was to be expected, however, they differ much in degree, and it is now becoming possible to recognize the effects of very powerful but not lethal currents, as well as to appreciate more clearly

the mode of action of currents of deadly strength. Dr. Charles L. Dana, of New York, has recently read a short paper on the subject before the Practitioners Society of New York, and some interesting experiences were mentioned by other speakers.

A very considerable number of fatal accidents have happened in the United States—it is said over one hundred—and a certain number of cases have been recorded in which men have been injured more or less severely, but not killed. In this country the number of deaths has been much less, and few, if any, non-fatal accidents have been reported. The sensations experienced by a man who has accidentally placed himself in circuit of an electric light current were vividly described in a paragraph quoted in these columns a few weeks ago; in this case the current was very strong, and consciousness was quickly lost. In other instances, in which the current was less strong, consciousness has not been lost, but the patient has experienced agonizing terror and pain. Such a current knocks a man down, and causes cramp, tetanic muscular contractions, to which, doubtless, the pain is mainly due. The tetanus passes off in a few moments, and the patient is soon able to get up and to use his limbs, though the part which came into actual contact with the wire may feel numb for some days or hours. The shock to the nervous system, however, is not so quickly got over, and in persons of a nervous disposition a persistent condition of neurasthenia or of traumatic hysteria (so-called) may remain for months or years.

As to the chance of survival, Dr. H. M. Biggs has made an interesting observation, which is that the majority of the fatal accidents have occurred on or after wet days. With a wet skin and wet clothes there is good contact, and therefore little burning of the skin, but serious internal effect. With a dry skin and dry clothes there is more burning of the skin, but less penetration, less shock, and less danger of death.

The pathology of the fatal cases is not very clear; where the current passes through the brain and medulla, in the manner in which it is intended to use it in executions, it is safe to assume that the functions of the higher cen-

ters and of the medullary centers are stopped, and the cells so altered as to be rendered incapable of further function; but this explanation will not apply equally well to cases in which the limbs only, or other parts of the body, are traversed by the current. It must also be remembered that nerve paralysis is not a frequent symptom in cases which recover; that, in fact, even temporary motor paralysis is almost unknown as an after-effect. Dr. Biggs, in four cases in which death was undoubtedly due to the electric current, found the following *post-mortem* appearances:

The blood was dark and fluid everywhere; the viscera were congested, especially the lungs; and there were petechial hemorrhages in the pleura, pericardium, and peritoneum. In one or two cases there were also larger hemorrhages underneath the pleura. On many of the points of hemorrhage in the serous membranes there were delicate deposits of fibrin on the surface of the membrane. *Rigor mortis* was well marked in all cases. Microscopical examination of the organs was not made, but examination of the blood did not reveal any morphological changes in the corpuscles.

These appearances clearly agree with those observed by Dr. Petersen in dogs killed by electricity in the Edison laboratory; but in two of these animals, in which the current had passed through the legs, capillary hemorrhages were found in the sheaths of the large nerves of the lower extremities and also in the spinal cord.

Several deaths which have recently occurred in America have proved that a fatal shock may be received from a telegraph or telephone wire if it has been accidentally brought in contact with an electric-light wire. In one case in New York a man in the employment of a telegraph company, who was engaged on a post to which no electric light was attached, in mending a telegraph wire, received a shock which caused his death; his body, entangled in the network of telegraph wires, remained suspended, presenting a horrible spectacle for a considerable time before the electric light current could be turned off. In the inquest on this case the jury added a rider to their verdict to the effect that the system of overhead

wires, as at present operated, is a constant menace to the lives and property of the citizens, and that electric wires, whether transmitting high or low tension currents, should be thoroughly insulated; that the linemen of the telegraph and telephone companies, as well as all electric light companies, should be imperatively required to wear rubber gloves, and to use insulated instruments while working upon the lines. In two other cases it is said a horse has been killed by putting its foot on a broken telephone wire which had fallen across and got into metallic contact with a wire carrying a high tension alternating current; in both cases persons who touched the fallen horse are reported to have received shocks, in one instance fatal.

Moved by the number of accidents which recently happened, the grand jury of New York have made a special presentment, in which they express the opinion that one death and one case of serious injury were directly due to the practice of attaching electric light wires to the same poles as those carrying telephone and telegraph wires. "We can not too strongly condemn this practice," the presentment runs. Not only is it "a constant menace to linemen, but also, by the breaking of a wire, contact between it and an electric light wire may be established, which will conduct into any house or office a deadly current over a telephone wire."

It is evident, therefore, that the progress of electric lighting is making us acquainted with a class of accidents presenting peculiar symptoms, and bringing about death in a special way, and that the danger is more insidious and more wide-spread than has been generally suspected.—*British Medical Journal*.

Editors American Practitioner and News:

CINCINNATI LETTER.—Cincinnati has had a sensation recently in a malpractice suit which resulted in the attempt of two lawyers to cowhide the editor of a medical journal. About the first of April, 1888, Dr. C. D. Palmer, Professor of Obstetrics and Diseases of Women and Clinical Gynecology in the Medical College of Ohio, and Gynecologist to the Cincinnati Hospital, operated

on a woman, and during the operation one of his needles broke and the piece could not be found. A few days later the doctor met with an accident, his horse running away, throwing him out under a culvert whence he was taken up for dead. He was taken to the Good Samaritan Hospital, where he lay in a semi-unconscious state for weeks, and was unable to return to his professional work for a year. When able to travel he went to the Atlantic coast, and afterward to California, and regained his lost health and strength to such a degree that his practice, hospital, and college work were resumed. During this time, while he is many thousand miles away seeking health, the woman goes to another doctor, complaining of great pain. Another operation is performed, and behold, a piece of needle is brought forth. Recently Dr. Palmer received a letter from a youthful firm of briefless barristers, intimating that unless he came down with some money he would be sued for damages. He refused to consider their proposition and was sued for \$10,000. This action was followed by a scathing editorial in the next number of the *Lancet-Clinic*, January 25th, from its editor, Dr. J. C. Culbertson. His were words that burn, the cautery applied with unsparing hand which cut the bone, penetrating nerves and tissue in all directions. The limbs of the law read, writhed, condemned, and sentenced the writer to a dose of cowhide. They sallied forth with their cowhides fresh and new. They entered the doctor's office, and, without presenting their cards, began using their pretty weapons. The editor, who was brought up on a big farm, soon recovered from his surprise, shook his powerful frame, took the weapons from the legal sprouts, gave them the dose they came to bestow upon him, walked to police headquarters with a cowhide in each hand and blood in his eyes, and quieted official fears by telling them he had only come to swear out a warrant for assault and battery. It is to be hoped that the action of these two attorneys will not only lead to the dismissal of the case with these champions, but to the disbarment of

the men who would resort to such means to retaliate on an editor. If lawyers can not obtain redress at law, who can? The plain path for the medical profession to pursue is to stand together, to boycott lawyers who undertake these "bleeding" cases, destroy their business and political aspirations where possible, and show that the medical profession is a unit, and a dangerous one to attack.

The annual contest for the Dawson prizes at the Good Samaritan Hospital was entered by a larger number of aspirants than usual. These contests in bandaging, drawing, and dissecting are made by the students of the Medical College of Ohio, and excite much rivalry in their respective departments. Five doctors from Cincinnati and vicinity are chosen in each arena to act as judges. They render their decision impartially and hand it to Dr. Dawson in a sealed envelope, which he opens Commencement night, and announces the successful names. The occasion is made a half holiday, with Professor Dawson as Master of Ceremonies. A number of speeches are made, interesting cases shown, and the annual feast winds up the occasion. The students and profession greatly appreciate Dr. Dawson's great heartedness and liberality. E. S. M'KEE, M. D.

AMERICAN MEDICAL ASSOCIATION.—The forty-first annual meeting of the American Medical Association will be held in the city of Nashville, commencing Tuesday, May 20th, and continuing till Friday, the 23d. In connection with the meeting of this Association there will be held the usual exposition of pharmaceutical, surgical, and sanitary products and appliances. This exposition is expected to be one of the largest and most interesting exhibits of the kind ever held. Pharmacists and others intending to exhibit their manufactures, etc., should address Dr. J. Berrien Lindsley, Chairman of the Sub-Committee on Exhibits, Nashville, Tenn., at once, as a large attendance is probable, and, though the space available for exhibits is considered quite ample, the local committee desires to exercise care and de-

liberation in assigning space and arranging the exposition so as to present every thing in the most attractive and effective manner. Choice of space will be given in accordance with date of application.

The following classes of applications will be entertained:

1. Medical books and stationery, charts and diagrams, busts, portraits, engravings, photographs, etc.
2. Hospital and ambulance plans and models.
3. Surgical instruments and supplies, general and special (gynecic, obstetric, orthopedic, laryngeal, otic, ophthalmic, dental, etc.)
4. Microscopes, analysis outfits, and electro-galvanic apparatus.
5. Pharmaceutical products.
6. Rubber goods applicable to medicine and surgery.
7. Invalid furniture.
8. Invalid foods.
9. Sanitary appliances, as ventilators, filters, water-closet basins, traps, and similar necessities, and disinfectants.

Applicants for space should state the character of their proposed exhibits, that they may be assigned to their respective groups. The sub-committee reserve the right of rejection in case of apparent reason.

J. BERRIEN LINDSLEY,
Chairman Sub-Com. Exhibits.

THE brain of the insane homicide and suicide, Daley, was found to weigh fifty-nine and one quarter ounces, and to show no gross pathological lesions. This is just the weight of the murderer Ruloff's brain; an ounce heavier than Jim Fisk's, and six ounces heavier than Daniel Webster's.

CAROTID ANEURISM.—The operation of ligature of the common carotid below the omohyoid for aneurism of that vessel was performed by Mr. James Hardie, of Manchester, January 4th, in the case of a gentleman aged forty-five. Up to the present time he has progressed favorably in every respect. We hope to give a full report of the case in due course.—*Lancet*.

QUININE AND ANTIPYRIN FOR THE CURE OF INFLUENZA.—A cablegram has appeared in the daily papers to the effect that the eminent physician of London, Sir Oscar Jennings, relies wholly upon quinine and antipyrin for the cure of influenza; the former drug to kill the microbe, the latter one to quell the pain. Also that Dr. Jennings denominates *la grippe* as "a bastard pulmonary rheumatism." The advocacy of antipyrin in the papers and in other ways has practically resulted in the absorption of the supplies of that drug held by the wholesale druggists of the country. The price has advanced over 100 per cent in sixty days.

SALOL IN THE VOMITING OF PREGNANCY.—By me it was successfully employed in cases where oxalate of cerium and other deservedly popular favorites had signally failed. I would again re-peatfully urge a trial of it on the attention of the profession.

For this purpose it is best given, frequently repeated if necessary, in small doses, laid on the tongue and worked down with a little water.
Dr. R. B. McCull, New England Monthly.

AN appeal has been made for the establishment of an Italian hospital in New York City. It is difficult to understand what necessity there can be for such an institution, in view of the fact that in none of the well-established hospitals of that city are Italians denied admission or treatment.

At the recent trial of a quack in Alabama, for violating the provisions of the medical statute, and his conviction, it was ascertained that there was no penalty affixed to the crime. The alleged reason for this is that the law was so tampered with during its passage through the legislature that the penalty was omitted.

It is reported from Ingersoll, ten miles west of Texarkana, Ark., that a woman gave birth to four finely-formed and well-developed girl babies on January 11th. The mother is doing well, but the father is reported to be prostrated from sheer joy, and will probably not recover.

URAL, A NEW HYPNOTIC.—This body, obtained by dissolving urethane in chloral, presents itself in form of crystals soluble in alcohol; little soluble in water, which volatilizes without decomposing, and is fusible at 106°. It imparts a bitter taste. It does not modify the blood pressure, and its administration is never followed by accidents. It is prescribed with success in cardiac affections, mental maladies, hysteria, etc.

VERY small doses of quinine suffice to cause tinnitus, just now. Like alcohol, quinine renders the person who takes it more liable to the influenza.

SPECIAL NOTICES.

HOFF'S MALT EXTRACT, TARRANT'S, has won an enviable reputation among the medical profession for its remarkable value as a nutritive tonic in convalescence and in wasting diseases. It has now achieved the proud distinction of being the only Malt Extract that has ever received an award of honor at a public exhibition in the German Empire.

We regard it as a superior Malt preparation, and have found it valuable in all classes where a palatable nutritive tonic has been indicated.

To guard against substitution, always specify *Tarrant's* when ordering.

THE original imported Hoff's Malt Extract, Tarrant's, is the only Malt that ever received an award of merit in Germany. It received the Bronze Medal at the Hamburg Exhibition of last year and was awarded the first order of merit (a Silver Medal), at Melbourne, Australia.

To prevent substitution specify "Tarrant's" when prescribing Hoff's Malt.

QUININE IN LA GRIPPE.—Among the agents that have been used for the cure of the influenza, quinine has perhaps been administered in the majority of cases, and the consequence has been an unusually large demand for the drug. This will bring out all the old stock of pills in the hands of druggists and naturally much that is unfit for use.

In this contingency those purchasing or prescribing pills or capsules of quinine should see to it that they get those easily soluble, so that they get the benefit expected from this valuable antiperiodic and tonic.

In this contingency Messrs. Parke, Davis & Co. state that they guarantee the quality and solubility of their capsules and oval sugar-coated pills of quinine sulphate and muriate. They have made a special study of solubility in these products, and invite a critical comparison of the pills made by their new processes without needle holes, which they, of all manufacturers, alone employ.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., MARCH 1, 1890.

No. 5.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

THE FOUR COMMENCEMENTS.

The Doctorate Address in the Medical Department
of the University of Louisville, 1890, by J. M.
Bodine, M. D., Professor of Anatomy
and Dean of the Faculty.

In human life there are four great commencement days: when we begin to be, when we begin to learn, when we begin to practice, and when we enter the existence beyond the grave.

The origin of life baffles the biologist; no eye, or instrument, or chemical analysis unfolds it. The child knows no more of its pre-natal existence and the years nearest birth than we do of posthumous being. No genius for definitions has yet been able to make a dictionary of life origins. Ingenious terms, invented by shrewd speculators, may delude reason and beguile fancy, but no scientist has demonstrated the essence or origin of life. Darwin's origin of species rests on a plausible hypothesis. Huxley's protoplasmic clay or ooze is "such stuff as dreams are made on." Tyndal tells us that "all life is from antecedent life." Must not all these theories terminate in an undeived, self-existent, all-wise being whose name is God? If God is matter, then we had as well say, with Pascal "It is no matter whether at all there is any God." Science simply tells us that our first great ancestor's name was *atom*, instead of Adam. But who animated that atom? If you are to begin your professional career as materialists, regarding man as simply a final evolution of chance, a superb animal, an accident instead of the product of a forecasting

design, then you had as well be veterinarians or mechanicians. It makes a vast difference, in the dignifying of your profession, whether you are to regard man's body as but a corral in which a herd of appetites and passions raven for food and lust for gratification, or as a temple in which a divine spirit witnesses itself to an immortal tenant. I assume, then, that whether a moment or a chiliad intervened the first creative and last crowning act, your body was "fearfully and wonderfully made" by a Divine Artificer, whose image it bears and whose birthright boon is immortality.

But starting with life as we trace it from the parental loins and womb, the pre-natal existence is enswathed in a mystery as profound as can be any being surviving the dissolution of the body.

What a man believes is basal to character. "As a man thinketh in his heart so is he." Ideals precede reals and fashion them. Only men of great faith can make others believe in them. The Christ-ideal dominating the Anglo-Saxon race has made its civilization. In our land the consensus of the people is that trained conscience, legislating character, and controlling conduct are the great things to be desired and preserved.

If men are the product of heredity and environment, "the sport of circumstances," then a penal code is an iniquity. If the moral quality of an action does not reside in the intention, but in the conditioning of the animal, then punish none but those whose parentage, food, shelter, and knowledge of hygienic laws have rendered it possible for them to be and to do right. Away with ethics, and substitute anatomy and physiology. Give the human beast good conditioning, and you will make him law-abiding, industrious, thrifty, and happy. But "man does not live by bread alone." He

has a hunger for "the true, the beautiful, and the good." "No pent up Utica confines his powers." The geography of earth does not bound his exploring powers. There are Stanleys of the sky.

I am not ignorant of the value of bread and beef to liberty. A sound body and a sound mind mutually complement each other. They are the hemispheres which, touching, globe a perfect manhood. But pampered nations have decayed, and no political machinery or physiological regimen have proved adequate to arrest this decadence:

"Ill fares the land to hastening ills a prey,
Where wealth accumulates and men decay."

Reputation is a bauble dependent on the caprice of public opinion, but character is self-consciousness and goes with us. The supreme consideration in Christendom is *character*. The man who possesses it, though penniless, is rich; though friendless, he has a great invisible constituency; though despised, he is docketed for vindication; though defeated in time, he is beaded for victory in eternity. "Time, the tomb builder," can not sepulcher it, and it will flourish in fadeless green when worlds are wrecked. When character is lost, all is lost, save the power to retrieve it, and that, in part, is the thing itself.

Froude says, "all improvement is from within outward." I long to see you men—high-minded men, who, "knowing nothing base, fear nothing known," to whom great thoughts and feelings shall come "like instincts unawares." You are to pass from under our watchful care to commence life in earnest, and we covet the honor of pointing to you as Cornelia to the Gracchi, and saying, "These are our jewels." You will be our crown of rejoicing or our brand of shame. Therefore we, the faculty of your *alma mater*, bid you remember that—

"Fame is what you have taken,
Character is what you give;
When to truth you waken,
Then you begin to live."

In view of what I have said, I beg you to lend no aid to those who would excuse and prolong their vices by pleading inherited diseased appetites and passions, necessitating the use of

narcotics and stimulants. Discourage such apologies, and impose a regimen and cultus to overcome morbid functional propensities. Because "the fathers have eaten sour grapes" and set their "children's teeth on edge" is no reason why they should entail a similar evil on their offspring. The idea that hereditary taint and proclivity for evil must necessarily be perpetual, is a suggestion too monstrous for a medical adviser to entertain and teach. Never allow your patient to feel that he is bound in the remorseless chains of fatalism. Put your oil into wounds instead of flames. You must be the prophet and not the executioner of hope. Hold forth the power of good habit when often repeated. Take Shakespeare's pre-script:

"Refrain to-night, and that will lend
A kind of ease to the next abstinence,
The next more easy, for use
Can almost change the stamp of nature
And master e'en the Devil, or throw him out,
With wondrous potency."

Life should be projected on eternity. We have commenced to be; how, we know not; when, we can not tell; but we are here, and so far as early consciousness is concerned we had no beginning. Every organ and sense was rudimentary while in the womb of darkness. So there may lie dormant in the body senses for which there is here no exercise or opportunity. We came here somehow, and we may be going somewhere—somewhen.

Humanity refuses to believe in annihilation. As the lamps were in the pitchers of Gideon's soldiers, and when the vessels were shattered shone forth, so when the body is broken the soul will shine. You may shut all the senses, so that a man can not see, hear, smell, taste, or feel, and yet a self-conscious being may live in the shattered tenement. You do not expect music from a stringless harp, no matter how harmonic the soul or deft the fingers of the harpist.

Observation protests the theory that intelligence is solely dependent on organization. The greatest minds have kindled their fires in the weakest bodies, and swan-like notes have been uttered by dying men. A failure of instrumental power does not conclusively argue the

annihilation of intelligent being. Cutting the wires does not prove the loss of battery energy. The deaf are made to hear by the skillful aurist; the optician can aid a failing vision; the telescope can make a desert space break out into oases of stars. One who has swooned or fallen into coma may be revived to consciousness; in sleep the vagrant brain is more active in dreaming than during the hours of waking. How rapid its action! In a moment it tours the world, and it would take a volume to record its travels; in an instant it fights a battle that it would take a folio to bulletin. What hoards of learning may be printed on the negatives of the mind by unconscious cerebration, which delirium may disclose! What treasures may be pigeon-holed in the brain to be drawn out by chance association!

One of the wonders of science is photographic astronomy. A star, far beyond the space-penetrating power of the largest telescope, registers itself on the plate of the photographic draughtsman. The acid touches it, and its exact image appears, and may be studied by the astronomer at his leisure. If these sidereal wonders can thus be brought from hidden depths by the Columbi of the sky, why may not a metropolis exist far beyond our ken, in which the Almighty has his Alhambra palace and holds invisible court, and in which angels and saints serve as obedient courtiers.

But recently the microscope opened to view worlds of highly organized life in the elements about us heretofore unsuspected. What advances have been made in medicine by the disclosure of microbes floating in the atmosphere and swimming in the water! Now, we know the power of the Prince of the Air and of the demons of darkness, and much of our skill is directed to the destruction of these germs, so infinitesimally small though so tenacious of life as to defy high degrees of heat and to survive baths in deadly acids. For aught we know, the air may be tremulous with the wave of celestial plumage, vocal with divinest music, warm with immortal loves. The microphone raises the hum of the ephemera into a concert of symphonies, and the foot-fall of a fly into a tread as loud as the thundering hoof. The time may come when "the music of the

spheres," now credited to fable, may become a recognized harmony, so that we may hear the wheel-work of the universe spinning to the measures of a mighty march. And so, death may open vision to spectacles sublimer than any scenery eye hath scanned, and open ears to harmonies sweeter than earth's orchestras, and bring to hearts joys transcending the dreams of poetry. It is possible that death may be enfranchising instead of obli-viating:

"The soul's dark cottage, battered and decayed,
Lets in new light through chinks that time
hath made;
Stronger by weakness, wiser men become
As they draw nearer their eternal home."

The chemist's retort, the surgeon's scalpel, and the biologist's microscope are not agencies for soul-hunting.

"The doctrine of an immortal spirit will never come from the dissecting-room or the laboratory unless it is first carried thither from a higher sphere. Yet there is nothing in these work-shops which can efface it, any more than their gases and exhalations can blot out the stars of heaven." If the body is ever shifting and substituting the particles that compose it, so that every molecule is replaced in periods of five to seven years, memory can not be located in matter; for, if it were, we would be continually sliding away from ourselves, and we would lose our identity. In the waste of your patients under imperfect nutrition and febrile combustion you will not see, *pari passu*, a loss of recollection. You will not find intelligence co-related to bulk and fats. It may be that emancipated spirits care as little for the cumbering clog of clay committed to the grave as a lobster for its cast-off shell or a butterfly for its abandoned cocoon. Men have remained for weeks in a state of suspended animation, showing no token of life save the absence of decomposition. "Whether in or out of the body they could not tell" when the trance was broken. In your practice you will see life retreat beyond your ken, and yet return. Could we generalize the facts a step beyond this line of observation we might be compelled to concede that all the dead are as really unclothed of flesh and independent of senses and organs as were these phenomenal cases.

If you accept the evolution theory, death may be but another link in that chain through which the angelic is developed from the human. In a higher sense than the poet thought we find it true that,

"There is no Death! What seems so is transition;
This life of mortal breath
Is but a suburb of the life elysian,
Whose portal we call Death."

Entered on that terrace of being we shall realize what the Great Physician meant when he said, "If a man keep my sayings he shall never see death."

I have talked to you thus, because I would see you more than anatomists, scrutinizing bones, muscles, and nerves; more than physiologists, studying cells and secretions; more than chemists, analyzing the tissues of which the body is composed. If you discern in man nothing more than the animal, you had as well practice on horses and companion jockeys and stable boys. The ideas with which you commence life will formulate the character you are to make in a profession which lowers its crest only to those who bear a divine commission and who stand in holy places. By reason of your calling and training you are to become moral and social factors in the communities in which you are to live. You are not to be whirled about by a revolving wheel, but you are to lay your hand upon its axle and give it direction and velocity. You are to mold the minds of men as well as make their bodies whole. You will belittle yourself if, adopting the trade of pedantry, you peddle the small wares of animalism and practice the vulgar arts of the faith-killer and heart-crusher. By recognizing the majesty of mind and by seeking to give trend to faith, love, and hope, your presence in the sick-chamber will be something more than that of a dispenser of drugs and a discerner of pulse and temperature. I want to see you men with broad-sided natures turned sunward, standing by your patient's bedside invoking divine direction to diagnosis and prescription. Act upon the rule of the Grecian poet,

"I seek what's to be sought—
I learn what's to be taught—
I beg the rest of Heaven."

You will have the opportunity of studying psychology, the interplay of the soul and its instrument. It is yours to harmonize the two. Health is the perfect equilibrium between our organism with all its constituent parts and the exterior world. Organic disturbance compels us to institute a new and more spiritual balance, to withdraw within the soul. The body is no more *we*, although it may belong to us. It is nothing more than the yacht in which we make the voyage of life, a boat whose weakness we study, whose structure we scrutinize without confounding it with our personality, which is to survive the wreck. You will see that if you diagnose correctly you will have to individualize your treatment that it may quadrate with personal idiosyncrasy. You can not classify your patients, mechanically, under some department of nosology, for every one is a special and unique case. A physician should covet a clairvoyant faculty to read an invalid through and thoroughly, that he may grasp the unity of the individual who has put his treatment under his care.

You will commence practice "the heir of all the ages." The wisdom of the past flings its treasures at your feet. The aggregate of inventive skill is yours. Scores of instruments helpful to diagnosis, to topical treatment, to the exploration of cavities, to heroic and mechanical surgery, to obstetric and gynecological operations, to subcutaneous treatment, to microscopic investigation, to chemical analysis, are yours, that were unknown to the Fathers of your Art. Medical statistics, the product of a large observation and many experiments, furnish you with data that will enable you to reach judgments with almost mathematical precision.

Mental and comparative physiology are new but revealing branches of medical science. The vegetable and mineral world have emptied their hidden virtues on the altar of science, and specifics and anesthetics of marked value and of pain-killing merit will make your practice a luxury as compared with that of your sires, who were compelled to see their patients sink under pitiless disease without ability to prescribe a remedy to arrest decline, or an anodyne to soothe suffering, and who were

forced to see the victims of their rude surgery writhe in their smoking blood, and twist under lacerated nerves, without an anesthetic to abate or conquer their pains.

You will enter upon a learned profession. You are to grapple with skill and prove yourself a worthy competitor. Your welcome to medical ranks may not be hearty, but do not despair. No man is, finally, likely to have so many friends as the man who has shown his capacity to do without any. Disdain no service in which you can heal, help, or learn. One of the greatest surgeons of modern times took his start from answering the call of a duchess to set the broken leg of her dog, which the family practitioner declined to do. Now mere creature-ward kindness should prompt the relief of suffering in a brute:

"He prayeth best who loveth best

Both man and bird and beast."

The great are never so great as when they stoop to help and heal the dependent and diseased. The homeless exile and medicant, the leprous pauper, the scrofulous lazzaroni, the shameless courtesan, the condemned murderer, the deformed freak, the domestic pet, the faithful beast of burden, the ungrateful patient and miserly patron may have claims upon your healing skill which no professional pride can set aside. If vivisection be defensible on the ground that a common pathology belongs to animated nature, and the effects of drugs on rabbits, guinea-pigs, and dogs are inferred to be co-pathic with their effects on men, why may not the same skill that hurts the lower to heal the higher animal, employ itself in emergency to mitigate or cure the maladies of brutes? One need not be "a brute of a doctor" because he doctors brutes.

You must not forget that all professions entail condescensions. The lawyer must defend the penniless and friendless felon, though his guilt be placarded on his person; the clergyman must trail his robes through slums of sin, and though his lawn be soiled he remains as stainless as if promenading the golden avenues of the Celestial City. So the physician, without fee, gratitude, or fame, must give time and talent, and often medicines, and, counting not

his own life dear, thread the breeding holes of pestilence with no antiseptic protection. No dungeon is too dark, no disease too loathsome or too infectious, no air too foul, no lazaretto too filthy, no dive too damned to quarantine philanthropy. And these offices are the more sublime because performed in silence and secrecy. You will breathe feculent airs and mephitic gases, encounter forbidding spectacles, become the custodian of disgusting secrets, mark the ravages of wantonness, hold your peace when censured, be bold when fronted by frowning ignorance, shameless superstition, and blushless empiricism. Your patience will be tried, your fortitude tested, your courage challenged, your motives impeached, your pride wounded, and oftentimes you will find yourself unrequited either by the gold or gratitude of those whom you have sacrificially served. You will, if you would toughen your manhood, "suffer and be strong." You will have need of tact to ward off the curiosity of the anxious and to preserve "truth in the inward parts" while compelled to the semblance of dissimulation in order to forestall fright and allay a fear that, encouraged, would prove fatal.

If business does not come at once, on commencing to practice, devote yourself to reading, and use every opportunity to do something professional, whether paid for it or not. See every operation, autopsy, and pathological specimen you can. Study botany in the fields, chemistry in the laboratory, and look into the invisible with your microscope. If seen thus engaged the people will credit you with seriousness in your profession, and your employment, without patients, will be your best advertisement, and it will bring you patronage. The route to preferment does not lie through the salons of society, the village sports, and is far away from the drink-shop. By complacency in yielding to the social and sportive, you will get the name of "Good Fellow," but when life is trembling in the parted scales, sobriety and skill are at a premium. You must "learn to labor and to wait." But, while waiting, work for knowledge and watch for opportunity. Win by application; woo by merit. "There is room at the top," though the profession be crowded.

Be able to do something better than those around you, and the call to do it is certain. You must keep up with the times. Things are moving, and you must move with them or be run over. Sit with folded hands, bemoaning the times, "waiting for something to turn up," and you will become atrophied and calcined; the rust of despondency will eat into your heart, and you will either turn aside, bribed by the promises of success, into some other pursuit, or lie down and die in despair. "This life of ours is like the deep sea-water, when with bold exertion we may swim securely on the surface, but to rest is to sink and drown." The power to endure is, perhaps, the crowning virtue of manhood. Only a few can wait long; believe when nothing is to be seen; hope when delay sickens the heart, and, "like the sturdy oak, add a new and wider ring to their mental growth with every year that creeps torpidly by them."

The fruits long ripening through your growing spring and lusty summer will fall into your lap, and your autumn will be golden with the fulfillment of promises that were tardy in coming, and a protracted Indian summer of success and honor will verge far into the edge of winter, and when you go to "your long home" the "mourners will go about the streets," and your good name will be as "ointment poured forth," a legacy to the profession, and a decoration to those who wear it proudly.

You are to enter a profession keyed so high—because alleviating of suffering, conserving of life, postponing of death—that no greed of gain will permit you to enrich yourself by the knowledge you may discover. Your triumphs are to add to the common stock of the world's wisdom. Nothing you may learn can be kept secret as the capital of a specialist, or patented to revenue cupidity. Whatever diminishes suffering, repairs organ or limb or sense, or prolongs life, is the rightful property of the profession. You would be as worthily employed in attempting to corner the sunshine, or to corral the air, as in essaying to monopolize a discovered specific or turn it into a commercial trust.

But on this account you are not required to make a common ware of your knowledge, or yield to the inquisition of the prurient, nor

to be victimized by the artful effort to get your opinion and prescription without credit or fee. Do not make your cases public property. "Let your works praise you in the gates."

Thus commencing and continuing, you will come to your last end, as I trust, full of years and honors. And when you commence the immortal life a grand and goodly company will welcome you to their companionship, while that approbation which is of more worth than all worldly wreaths and words will gladden your ear and swell with eternal bliss your soul—"Well done, thou good and faithful servant."

But I may not keep you longer with words. We must part. Soon the rushing train will wheel you to the scene of your labors. I could not, if I would, speak the blessing your instructors would bequeath had they the power to bestow it. Living, we will cherish pleasant memories of our interviews; dying, we will hope to meet you at your coming in the mighty parliament of the happy immortals.

Go, then, to hail and honor a calling that awaits you, clothed with the insignia of nobility. Panting, as you are, to practice its philanthropies and reap its rich awards, I pray you may be spared disappointment, and that you may realize that radiant future of your youthful dreams. Go, strong with courage, tranquilized by confidence, fortified for assault, invulnerable to defeat, and winged with hope. Pain cries for your help from its rack; disease summons you from its couch of distress; death entreats you to soften its pillow; posterity beckons you to hand it to its cradle gently. "Farewell! a word that must be, and hath been—A sound which makes us linger;—yet, *farewell!*"

GRIPPE, INFLUENZA, OR EPIDEMIC CATARRHAL FEVER.

BY C. B. JOHNSON, M. D.

We are passing through a world-wide epidemic of *grippe*, or, as some prefer to say, *influenza*; for in certain quarters the name *grippe* is objected to because of its foreign origin. But the same objection can, with equal propriety, be urged against calling the disease *influenza*, as this name, together with a severe epidemic of the disorder, was

imported from Italy into English-speaking countries about one hundred and fifty years ago.

In the several countries in which the epidemic has from time to time appeared, it has received particular designations, and some of these we find peculiarly expressive. In one German-speaking country it is called "*blitzkatarrh*" (lightning-catarrrh); in another, "*modiefieber*" (fashionable fever). As the name influenza has precisely the same meaning in the Italian tongue that *influence* has in English, it is certainly not an inappropriate appellation. The old English name, epidemic catarrhal fever, has the merit of at once suggesting several leading characteristics of the disease. In France, for many generations, this complaint has been denominated *grippe*, a name that is said to be derived from a word that means to seize. This designation, that our newspapers have already contracted into "*grip*," seems to please the popular ear; it moreover has the advantage of being short, sharp, and, with our English interpretation, expressive; consequently, as an apt appellation for the disease, "*grip*" has doubtless come to stay. Among medical men, however, the more euphonious and dignified name, influenza, will probably hold its place for some time.

Influenza is a self-limited epidemic disease that usually attacks the respiratory passages, though sometimes instead spends its force on the mucous surfaces of the gastro-intestinal tract; it is, moreover, attended with high fever and very great depression, and having suffered from the ailment once does not confer individual immunity from future attacks.

Rare indeed must be the case of the medical man who, from almost hourly observation and oftentimes personal experience during the present epidemic, has not had opportunity to familiarize himself with the symptoms of influenza. In epitome these are: a sudden onset, chilliness followed by high fever, severe headache, pain, and general soreness over the whole body; tongue coated white, bad taste in mouth and extreme repugnance for food; urine

at first scanty and high-colored; catarrh of certain, sometimes nearly all, mucous membranes, with concomitant sneezing, cough, sore throat, nausea, and tendency to looseness of bowels. From first to last patient is unaccountably weak and much depressed in body and mind. Convalescence usually slow, with proneness to relapse, and attended with disinclination for either mental or physical exertion.

About 11 A. M., January 9th, of this year (1890), I was sitting quietly and alone in my office, when all at once, with the quickness of thought, I became conscious of a feeling of chilliness in the back of my neck. This sensation was speedily transformed into one of extreme coldness, and coincident with this transformation passed down my back and from thence radiated over my entire body. So surprising in their suddenness were my sensations that I instinctively looked round to see if my outside door had not blown open and permitted a rush of January air to envelop me in its penetrating coldness. But only a glance toward the tightly closed door was needed to convince me that not so much as a breath of cold air was coming from that quarter, while a glowing hard coal fire in the stove, near which I was sitting, caused the mercury in a thermometer, hanging on a wall some ten feet distant, to stand at 70°. Realizing that my chilly sensations were in every sense subjective, I thought, almost aloud, "O, it's the *grippe*!" But upon second thought, and with that readiness in human nature to have something happen to almost anybody save one's self, I said, "Pshaw! I'm only taking cold."

I soon began to sneeze, and a little later warm water trickled from my nostrils. At the usual time I went to dinner, and, remembering the injunction to "stuff a cold," ate very heartily. In the afternoon I attended to my business as usual, though not without considerable discomfort. Meantime over my body flashes of heat seemed to play a sort of hide-and-seek with dashes of cold. I ate supper as usual, but not with my ordinary relish. Next I attended to a professional call not two blocks from my resi-

dence; nevertheless, in going to and from the patient's house, I became conscious that my walk was a little unsteady from a dizzy sensation about my head. At bedtime I realized that all my symptoms of "taking cold" were much exaggerated; my eyes were painful and watery, my nose was hot, and from it warm water was almost streaming, while just over my eyebrows I was suffering from quite a severe headache.

Upon going to bed I took a capsule containing a sixth of a grain of opium, two grains of carbonate of ammonia, and a grain of camphor. My sleep was not altogether restful—indeed, was almost broken in character. I, however, in wakeful moments attributed this to the fractional dose of opium, though I was not unmindful of the fact that my fever was all the time increasing. About 7 o'clock next morning I wakened from my unsatisfactory sleep with a violent headache, a bitter, metallie taste in my mouth, while my tongue was clammy and my lips were dry. I had a half-nauseous sensation in my stomach and a feeling of "weakness" rather than positive tenderness in my bowels. In the back of my neck, in my right shoulder, and across the region of my kidneys I had severe pain, though, to tell the truth, I ached in every fiber of my body, and, taken altogether, felt wretchedly sick. I no longer had any disposition to question the fact that I was suffering from an attack of genuine *grippe*.

I took fifteen grains of antifebrine, and in due time felt some easier. There being considerable tendency to constipation, and, noticing that the kidneys were a little inactive, I drank freely of a solution of cream of tartar; the acid taste of this, in my feverish condition, was most grateful to my palate. After a time I began to sweat a little. Any attempt at sitting in an upright position was attended with dizziness and produced pain across the small of my back. During the day I took about fifteen grains of quinine. By turns I had sweats and feverish spells. Night came on again, and I confess I dreaded to pass through it. I took another dose of antifebrine and tried to sleep. On the whole, my night's rest was

far from satisfactory, and some conception of my feelings may be suggested by the fact that I found a large double bed much too small for my needs.

The next day I felt that I was improving, that is, the more acute symptoms were abating, though my utter prostration seemed wholly inexplicable. I now ate and relished, to an extent, a little orange, but the mere thought of food was almost sickening. The third day I sat up part of the time and began taking, with a little effort, some light food; the sight of hearty victuals, however, was still repulsive. The fourth day I was round, but had little strength and almost no energy. I took bark and iron, and, though it required some effort at first, ate quite heartily of beefsteak and other nourishing food. For many days my legs were very weak, and after much walking pained me greatly. About three weeks went by before I regained my wonted strength. After the fever and more acute symptoms subsided, I had a bronchial cough that annoyed me for about two weeks.

Influenza being a self-limited disease, if left to itself will run, in the great majority of cases, a favorable course and leave the patient in his usual health in the end. This is no conjecture, as perhaps the majority of those attacked have contented themselves with little or no treatment, or else made use of remedies that could have had scarcely any influence on the course of the disease. Nevertheless, we can do very much to palliate unpleasant symptoms and prevent serious complications by judicious treatment. For the high fever, headache, and muscular pain antifebrine is a most excellent medicine, and in nearly or quite all cases quinine is indicated. To allay fever and relieve headache and muscular pain, aconite may be used, but in my experience is not nearly as useful as antifebrine. For the cough, sore throat, nausea, diarrhea, etc., the usual remedies for these troubles must be used. Although muscular pain and soreness are part of the symptoms that go to make up the disease, yet a species of rheumatism seems in some cases to accompany or follow

the ailment; this of course calls for appropriate treatment. During convalescence the patient should refrain from all undue exposure, and should have tonics and good nourishing diet.

In this locality influenza first showed itself the last week in December. In many particulars the disease has acted as if it were, to a certain degree at any rate, contagious. In a number of instances it has been observed that one member of a family would be stricken, and in the two or three days following most of those in the house would have the trouble in varying degrees of severity. Making a rough estimate, it may be said that three fourths of this community have already suffered from the disorder; many of them of course lightly, yet their symptoms were unmistakable. With us the disease has been attended with very little fatality. One reason for this light death-rate is perhaps found in a remarkable immunity we seem to enjoy from pneumonia, as with us a typical case of the latter disease is so rare as to be almost a curiosity. The three well-known types of influenza, viz., cerebral or nervous, thoracic and abdominal, were well marked here. The majority of those attacked complained most of severe headache, high fever, and muscular pains; these were sufferers from the cerebral variety. Another class of cases had sore throat, cough, pain in lungs, and shortness of breath for leading symptoms, and hence were referred to the thoracic type. A third group found their principal inconvenience to arise from obstinate vomiting and diarrhea, or, in other words, had the abdominal form of influenza. While these three types of the disorder were plainly marked, a great many cases, perhaps the majority of those seen, were compounded of the three varieties. As to complications, rheumatism and neuralgia most often appeared. In one case there was exceedingly painful torticollis; in another, severe otitis, followed by suppuration. A medical friend tells me he had a fatal case of cerebral congestion to follow the disease. In all the varieties debility was a marked feature.

Are hay fever subjects exempt? Meeting a personal friend on the street one day, I accosted him in a familiar way, and asked if he had had the *grippe*. He answered: "No, we hay-fever fellows don't have it." I was, of course, interested, and made more particular inquiries. He told me that there were some fifteen persons in the community who are subjects of hay-fever, and that so far not one of these had been attacked with influenza. A medical friend in another locality has some facts pointing in the same direction.

Influenza was epidemic in this country precisely one hundred years ago, and after this date was a frequent visitor to our shores until early in the forties, when, previous to our present invasion, it seems to have prevailed in a general way for the last time. Noah Webster is authority for the statement that in 1698, 1757, 1761, and 1781, influenza had its origin in America, and from thence spread to Europe. This is in direct contrast to the usual course of the disease; that is, in most cases it travels *from* rather than *toward* an easterly point of the compass.

Eberle, in his work on Diseases of Children, speaks of an epidemic in 1824 that was confined almost exclusively to children. By way of contrast to this, it is said that in the universal epidemic of 1782 the little folks were, in nearly all cases, exempt from attack. In a general invasion of the disorder in 1712 very many of those stricken were seized with an uncontrollable desire to sleep, and in consequence the disease for the time was called "sleeping-sickness." An epidemic in 1732 was peculiar on account of the great number of patients who had bloody discharges from the nose, mouth, lungs, and bowels. In 1782 all who had the complaint sweat very profusely, and for this reason the people of that time gave it the name of "sweating sickness."

Reference is made above to Noah Webster as an authority in influenza; possibly it is not generally known that about the beginning of this century our great lexicographer, after much labor in collecting data, published a book entitled "A Brief History

of Epidemic and Pestilential Diseases." In this work the author seems to have gathered a great many interesting facts pertaining to influenza. It secured recognition in Europe, and still holds its place as an authentic history of epidemics.

Most medical men in our day believe that the disease is propagated by minute organisms. This notion, however, is not a new one, as so long ago as 1855 George B. Wood, in speaking of the causes of influenza, after referring to the inadequacy of all telluric and atmospheric influences to account for the rapid spread of the disease, said: "The last notion which has been advanced as to the epidemic cause is that it is organic, consisting of innumerable animalcules or vegetable microscopic fungi, which have the power of propagating rapidly in the atmosphere, but run a brief existence. There is some plausibility in this idea. It explains many of the extraordinary movements of the epidemic, and accounts for the fact of individuals from an infected district becoming the center of a prevalence elsewhere. They may bring about their persons or in their baggage organic germs, which may soon fill the atmosphere with their progeny."

Referring to the causes of influenza, so far back as 1857, Sir Thomas Watson said: "Taking the insect hypothesis, and knowing, as we do, that some animal poisons—smallpox, for example,—have the singular property of multiplying themselves in the human body like yeast in beer, we may conceive that diseases produced by animalcules may thus infect the fluids of the body and become contagious in the fullest sense of the term. Lastly, the uniform duration of these epidemics has been supposed to add probability to the notion that they result from the operation of some organic principle which has its definite periods of growth and decay."

It is only fair to say that neither Wood nor Watson looked upon this theory as anything more than hypothesis—a view that, with the light they then had, was just and proper.

Professor Burrill, of the University of Illinois, a well-known microscopist and bacteriologist, has been making search for the germ of influenza, and is making gratifying progress, though at this date his labors are not sufficiently matured to justify definite conclusions.

Some writers trace influenza back before the Christian era, others to the middle ages; but since 1510 medical men have recorded the course of many epidemics of the disease with considerable accuracy. Since the date mentioned more than ninety epidemics have gone over all or a greater part of the known world. More than two hundred years ago Thomas Sydenham, a prince among the medical men of the seventeenth century, described the disease under the name "*peripneumony notha*" (bastard or spurious pneumonia). He says: "At the beginning the patient is hot and cold by turns, giddy upon the least motion; his eyes and cheeks are red and inflamed; he has a cough, and in coughing feels a violent pain in his head; he vomits up all liquids; the urine is turbid and very high-colored; the blood taken away resembles pleuritic blood; he breathes quick and with difficulty, and has a pain in his breast. This disease is distinguished from a dry asthma, as being accompanied with evident signs of a fever, which never appear in that distemper, though they are much more gentle and latent than in true peripneumony (pneumonia)." (From Wallis' Sydenham, London, 1788.)

About one hundred years ago William Cullen, the great Edinburgh physician, and the leading medical authority of the last century, described the disease with his well-known accuracy. He says: "The mention of this last (he had just referred to epidemic catarrh or influenza) leads me to observe that there are two species of catarrh, as I have marked in my Synopsis of Nosology. One of these, as I suppose, is produced by cold alone, as has been explained above, and the other manifestly is produced by a specific contagion. . . . It comes on with more cold shivering than the catarrh arising from cold alone, and sooner

shows febrile symptoms, and these likewise in a more considerable degree. Accordingly it more speedily runs its course, which is finished in a few days. It sometimes terminates by a spontaneous sweat, and this in some persons produces a miliary eruption. It is, however, the febrile state of this disease that is especially finished in a few days, for the cough and other catarrhal symptoms do frequently continue longer, and often, when they appear to be going off, they are renewed by any fresh application of cold." (From First Lines of the Practice of Physic, by William Cullen, Philadelphia, 1822.)

It has been my fortune to see no better description of influenza than that of Sir Thomas Watson in his well-known Lectures, a book that, it is needless to say, has perhaps been more widely read among physicians and done more to influence medical thought than any work published in the English language. Watson delivered his first course of lectures during the winter of 1836-7, and in January and February of that season influenza was epidemic in London. During its prevalence Watson lectured on influenza, and, with his usual felicity of expression, produced a clear, graphic, and accurate description of the disease. He says: "The symptoms, taking them altogether, are somewhat as follows: The patient is chilly, and perhaps shivers, presently headache occurs, and a sense of tightness across the forehead in the situation of the frontal sinuses, the eyes become tender and watery, and sneezing and a copious acrid defluxion from the nose ensues, followed or accompanied by heat and uneasiness about the throat, hoarseness, a troublesome cough, and oppression of breathing. In short, the symptoms are the symptoms of catarrh, including in that term all the varieties thereof that are sometimes met with separately; gravedo, coryza, bronchitis, and with these symptoms a sudden, early, and extraordinary subdual of the strength, and most commonly great depression of spirits. The debility which comes on at the outset of the complaint is one of its most singular phenomena, taking place in some cases almost

instantly, and in a greater degree than would seem proportioned to the malady which it thus ushers in. Indeed this rapid prostration of strength is more essentially a part of the disorder than the catarrhal affection, which sometimes (though rarely) is absent or imperceptible. It is upon the mucous membranes, however, that the stress of the disease generally falls, especially upon the internal lining of the air-passages. Those of the alimentary canal seldom escape entirely, but they suffer in a less degree. The tongue is white and creamy, the palate loses its sensibility, the appetite fails, nausea and vomiting are not uncommon, and sometimes there is diarrhea. The pulse, in the uncomplicated disease, is soft and generally weak. The skin, at first hot and dry, soon becomes moist, and sometimes exhales a peculiar musty smell. The patient complains also of pains in the limbs and back, and of much soreness, a bruised fatigue or tender feeling along the edges of the ribs and in various parts of the body. In its simple form and ordinary course the disease abates of its violence after two, three, or four days, and the patient is usually convalescent before the termination of the week, but cough and much debility are apt to survive the other symptoms, and while these survive the complaint is very easily renewed." (Watson's Lectures, Ed. 1857.)

Thus, at the risk, I fear, of taxing the patience of my readers, I have taken the liberty of quoting what three great English physicians and teachers, one of them of our century, one of the eighteenth and one of seventeenth, have had to say on influenza, a disease that has so recently excited our curiosity and that we have had such ample opportunity to study.

CHAMPAIGN, ILL.

DOCTOR: "Well, Dennis, did you take the pills I sent you?" DENNIS: "Indade, docthor, an' I did not; ye wrote on the box 'One pill three times a day,' an' I've been waitin' till I see you to ask you how a man was to take a little bit av' a pill loike that three times in wan day?"—*Harpers' Weekly*.

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D., James M. Flint, M. D., J. A. Kidder, M. D., William Lee, M. D., R. Lorini, M. D., Washington Matthews, M. D., C. S. Minot, M. D., H. C. Yarrow, M. D. Vol. 1, A to J—Vol. 2, K to Z. Royal 8vo, 731 and 799 pp.; leather. Philadelphia: Lea Brothers & Co. 1890.

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THE London Medical Recorder states that methyl-benzo-sulphonic acid has sweetening properties many times superior to saccharin. Like it, too, the new drug has disinfectant properties.

Abstracts and Selections.

THE USE OF ANESTHETICS IN NATURAL LABOR.—Obstetric anesthesia is quite different from surgical anesthesia, the latter being indicated for all obstetrical operations. Obstetric anesthesia may be general or local. For the former are used ether, chloroform, chloral, and a variety of mixtures, including the bromide of ethyl and the protoxide of nitrogen. Chloral can hardly be considered as a general anesthetic in the same sense as ether and chloroform. An injection of three or four grams of chloral in solution given during the period of dilatation, and repeated perhaps in four or five hours, will often prove of the greatest benefit and comfort to the patient, regulating the pains, moderating the suffering of the patient, and abbreviating the duration of labor. In the latter part of labor chloral is less useful than chloroform, this substance being now almost universally used in parturition. When it is employed only in the first stage of anesthesia no particular influence is exerted upon the contractions. If it is pushed to the second stage, the contractions are retarded, but soon resume their normal rhythm. In the third stage of chloroform anesthesia the contractions are diminished or may cease altogether. This is a stage of danger, for not only the uterus but the heart and other muscular organs may be paralyzed. The fetus experiences very little of the effect of the chloroform. The author's experience is summed up in the following propositions:

1. Chloroform given in small doses produces a condition of physical and moral calm in the patient.

2. If the inhalations are prolonged for a considerable time, the result will usually be an attenuation of the uterine pain. The perceptions of the patient become less keen and the uterine contractions are slower.

3. If the period of complete anesthesia is reached with analgesia there is surgical and not obstetrical anesthesia.

4. In some cases chloroform excites instead of calming, and in such cases its use should be discontinued.

5. In some cases chloroform has unquestionably diminished the retractability of the uterus, and has thus been the cause of more or less severe hemorrhage after labor.

6. Chloroform has no action upon the fetus.

7. Chloroform given during the period of expulsion has a less decided effect upon the contractions of the abdominal muscles and the resistance of the perineum than is gen-

erally supposed. The sensation of pain at that period is not entirely abolished, the contractions are frequent, and Charpentier has failed to notice that which has been called by Campbell dissociation of the sensations of touch and pain.

Chloroform is especially indicated—

1. In primiparae who are nervous and excitable, and in whom the pain may even cause delirium; also in those with whom the labor is greatly prolonged, thus becoming a source of danger.

2. In all cases in which there is a spasm, contraction, or rigidity of the back of the neck or body of the uterus. Contra-indications are the absence of severe suffering, the existence of placenta previa, general prostration, disease of the circulatory or respiratory organs, cerebral disease, alcoholism, etc.

During the period of dilatation chloroform is most required, but only to the extent of obstetric anesthesia, as a rule. It sometimes gives rise to nausea, vomiting, headache, and various nervous troubles. Hemorrhage is not likely to result unless the anesthesia is profound. Chloroform can not cause convulsions; on the contrary, it is one of the best means for relieving them. It may also be useful in warding off puerperal mania from those patients in whom the intense pain of parturition might lead to such a result. Dutertre has found reports of forty cases of sudden death during labor attributable to chloroform, but of that number thirteen should be eliminated as irrelevant. Of the others, some had cardiac or pulmonary disease, some suffered from alcoholism, and in the others narcosis was too profound. A first condition in the use of chloroform is that it be chemically pure; death from respiratory syncope may follow the use of an impure article. Small quantities should be given, the patient being in the horizontal position, and there should be an interval between successive inhalations.

Subcutaneous injections of antipyrine, twenty-five centigrams at a dose, have been used in a number of cases to produce obstetric anesthesia. Chiari and Guéniot report good results from its use. Various mixtures have been suggested, in most of which ether, chloroform, or chloral is an element. Doléris has advised the local use of a five-per-cent solution of cocaine muriate to mitigate the pain of labor, but the author expresses his views upon the subject as follows:

1. Nothing can be applied to relieve the pain caused by the distension of the lower segment of the uterus, which causes the pain felt during the contractions.

2. Applications of cocaine may give relief if they reach the nerve endings of the supravaginal and intravaginal portions of the cervix and the nerves of the vagina. Thus the pain of dilatation may be modified.

3. For the pain produced by compression of the nerve trunks of the pelvis no local application will avail.

4. The pain in the vulva and vaginal mucous membrane during expulsion may be somewhat modified by local applications.

As to the value of hypnotism in parturition, it must have a limited range. Of thirteen cases in which it was tried, it was successful in only four, the patients all being of a hysterical temperament.—*Charpentier, Bull. et mém. de la soc. obst. de Paris, 1889, N. Y. Med. Journal.*

TYPHOID FEVER IN CHILDREN.—The treatment adopted in all my cases is limited to the attainment of two objects, viz., to keep the fever within the safety limit if possible, and to support the strength of the patient. As long as the temperature is kept under 103° F., little medication is used; if it went beyond this point, febrifuges were given *p. r. n.* Antifebrin and antipyrin are used to some extent, but my chief reliance has been on the cool sponging of the surface of the body with water at about 85° to 90° F. To the water a little bay rum or alcohol is added. The sponging process is repeated every second or third hour. In the very high temperatures, 105° F. and over, the antifebrin and antipyrin are very satisfactory in their action. Stimulants are used in all my cases, generally commencing at the beginning of the third week, and in some cases earlier. As is well known, their employment demands close watching, and they should not be given too early. Opiates and astringents are not used. Milk is the principal article of diet in every case, and, indeed, the only one for the first two weeks of the fever. To this is added the beef peptonoids, meat juice, and beaten egg from time to time, and gradually farinaceous foods.

In conclusion, I present the following points, which seem to be established from my cases:

1. Typhoid fever attacks young children only about one third or one fourth as often as it does adults.

2. As far as is known, it attacks boys more frequently than girls.

3. The prognosis is better in young children than in grown people, the percentage of deaths being from two to six in the hundred, while in the adult the death-rate is

from 8 to 20 per cent, according to the authority quoted, differing in different places and in epidemics. Murchison, of London, whose fever reports are probably the most extensive, gives the mortality in the London hospitals through a series of years at 15.6 per cent. Hutchinson, quoted from Pepper's System of Medicine, gives the mortality at the Pennsylvania Hospital during a period of twenty years as 19.5 per cent. Liebermeister states the mortality at Basle through a long period to have been from 27.3 to 8.2 per cent, the difference being due to the treatment.

4. The treatment best adapted for typhoid fever in children is that which keeps the temperature within reasonable limits without attempting to force it down too far, and supports the strength of the patient until the disease has spent and the fever has left. Any procedure which has neither of these two objects in view is unnecessary and harmful, and it is far better not to treat the disease at all than to treat it too much. The more powerful depressants, aconite, veratrum viride, gelseminum, etc., are contraindicated. The ordinary diffusive stimulants, ammonia, nitrous ether, etc., and the usual heart tonics, quinine, digitalis, etc., are not needed, and therefore may do harm. The best febrifuge is the cool sponging with water at 85° to 90°, assisted, when the fever rises to 104°, by the antipyrin or phenacetine. Alcohol, in some of its various forms, is the best stimulant. Milk is the best diet. *Dr. H. N. Read, Brooklyn Medical Journal.*

HERNIA IN YOUNG CHILDREN.—The method of treatment for inguinal hernia which I have employed for the last two years is as follows: A skein of worsted is used, which, stretched out straight, should be twenty-two inches long. The threads should be tied across at intervals of about two or three inches, to keep them together. One end of the skein is placed over the abdominal rings and the folded worsted is passed horizontally across the abdomen over the line of the crest of the pelvis to the opposite side, around the hips, behind the pelvis, and over the hip on the side of the hernia. The end is then passed through the loop of the skein and will here form a knot, the bulging portion of which must be carefully adjusted so as to lie against the hernial opening, and being carried down to the upper part of the thigh it is then brought around the external side near to the great trochanter, and there tied or fastened with a safety pin. Mr. Pye recommends alloo yarn as being improved for

this purpose by washing. In the case of very young infants lambs' wool will be sufficiently firm. I have found Saxony good for the trusses, taking from a quarter to a half of an ordinary skein, according to the circumstances of the case, and applying it in the manner described. Several of the trusses should be kept on hand by the mother of the infant. They can be washed, and should of course be changed as often as is necessary for purposes of cleanliness. In the case of double inguinal hernia mentioned above I used this dressing, applying it to each side. It was perfectly successful, and in spite of the fact that its use was necessary during warm weather on a child that was quite fleshy, no considerable difficulty was experienced in preventing chafing. The child wore the dressing pretty steadily for about four months, and after that for a few days at a time when it had any cough or trouble which might cause a recurrence of the hernia. I have used it on several other infants with equally good results.

In the case of two little girls, sisters, aged seven and nine years, in both of whom inguinal hernia had developed, this method of treatment was used with perfect success so far as the retention of the hernia was concerned.—*New Orleans Medical and Surgical Journal*.

AMMONIA AND CHLOROFORM IN CROUP.—As far back as 1853 I treated what we then called phagedenic croup by inhalation of chloroform vapor with vapor of ammonia. There had been an epidemic of croup in the village, and in three fatal cases I had found, on *post mortem* inquiry, separation of fibrine in the heart, and had assigned the cause of death to the resultant obstruction. I was led, thereupon, to administer ammonia very freely by the mouth in such cases in order to maintain the fluidity of the blood. In one case the patient was a child six years of age, who absolutely refused to swallow medicinal doses of ammonia. In the house in which he lived there had been a death of another child from the croup, and, as in this new case death seemed certain, I determined to administer the ammonia by inhalation in combination with chloroform. With very little trouble I produced a gentle narcotism with the combined vapors, and was then able to increase the quantity of ammonia considerably. I kept up the inhalation for fourteen hours, administering food by enemata. In brief, the patient began to breathe with comparative ease within an hour after the commencement of the inhala-

tion. In the course of three hours he had a loose cough, with expectoration which was easily ejected, although there was continued sleep. The fever rapidly subsided, and when the vapors were finally withdrawn there was quick return of consciousness with complete subsidence of the acute symptoms. The recovery was rapid and complete.

The chloroform was used in this instance in order to allow the ammonia vapor to be carried into the circulation by the lungs while the patient was asleep and under easy control. The fetid odor from the throat very soon subsided under the antiseptic action of the substances inhaled, the ulceration of the mucous surface was favorably influenced, and portions of croupous membrane free of all feter were easily expectorated.

In later research I tested the antiseptic power of ammonia vapor by the side of the vapors of other chemical bodies. I tried it by the side of the vapor of chloroform, and discovered the new fact that the vapor of chloroform is nearly as good an antiseptic as ammonia vapor itself. I used these two vapors, singly and combinedly, with pure oxygen, and found that in the presence of pure oxygen the antiseptic action was, in both cases, as perfect as in common atmospheric air.

Here are two agents, vapors of ammonia and chloroform, both capable of administration by inhalation, both antiseptic, and both readily combinable either with oxygen or common air. Ammonia is not only antiseptic, but is alkaline in its reaction, is a diffusible stimulant, and, in the blood, is a solvent. Chloroform is an antiseptic, a narcotic, and, as I have repeatedly demonstrated, an antipyretic. By the combination of the two vapors we secure, therefore, a remedy which neutralizes acidities, sustains the circulation, reduces pyrexia, holds the blood fluid, relieves pain, induces sleep, and resists decomposition.

I take an alicolic solution of ammonia (830 alcohol saturated with ammonia) and mix it in equal parts with chloroform. When the solutions are mixed, any water which separates is removed by blotting-paper, and in this way a mixture of ammoniated chloroform is obtained ready for use. In administering this compound by inhalation of the vapor I put one to two fluid drams of it into a bottle with a leather inhaler armed with an expiratory valve.

From the first the ammonia vapor is deprived of much of its pungency by the presence of the chloroform, and, in time, as the

narcotic begins to take effect, the pungency of the ammonia is covered so effectually that larger quantities of it can be inspired without cough or irritation.—*B. W. Richardson, M. D., Medical Abstract.*

ANUS SUBURETHRALIS.—Dr. Ziegenspeck, of Munich, described a case of this rare malformation in a recent number of the *Archiv. für Gynäkologie*. The anal orifice was absent in a new-born child, and the lower end of the rectum ran along under the integuments of the perineum and scrotum to open by a narrow orifice close under the root of the penis. As there was evidently obstruction of the bowel, Professor Schultze excised the skin of the end of the rectum, sewing its mucous membrane to the edges of the wound. The anus so formed acted very well, as observation of the case for several years has proved. The explanation of the malformation seems simple, according to Dr. Ziegenspeck. The anal tubercles, described by Reichel, coalesce with the rectum, and draw forward the thin bridge of skin which covers and unites them. As no anal orifice can form, the rectum becomes dilated and pushes forward beyond the anterior union of the genital cleft, opening close under the urethra. Thus suburethral anus is an extreme form of the scrotal and perineal varieties.—*British Med. Journal.*

BACTERIOLOGY OF INFLUENZA.—Those who have followed the character and spread of the present epidemic on the Continent and in this country must, no doubt, have come to the conclusion that, like other epidemic diseases, influenza is spread by contagium, and must be due to a living organism, a microbe. The discovery of this has been announced from Vienna. Some of the daily papers, on Wednesday of this week, brought the news that the microbe of influenza has been identified by Drs. Maximilian and Jolles, working in the Vienna Bacteriological Laboratory under Prof. Weichselbaum. It is stated briefly that this microbe is similar to, but not identical with, the microbe of croupous pneumonia. Weichselbaum has, independently of Fränkel, of Berlin, shown that genuine croupous or fibrinous pneumonia is due, not to the bacillus of Friedländer, but to a capsulated diplococcus—the diplococcus pneumoniae—having special morphological and cultural characters. The discovery of the influenza microbe, coming from such a distinguished and reliable source, deserves in itself careful attention, and this is enhanced by the fact that in the influenza

of the present epidemic some kind of pulmonary distemper is one of the conspicuous symptoms; and this, though generally mild and of the character of a slight bronchial catarrh, has yet proved fatal in a certain percentage of cases, terminating as severe pneumonia. On the other hand, it is necessary to bear in mind that in these fatal cases the pneumonia is not of the same nature in all cases; the *post-mortem* examination shows it to be in some instances of the character of severe catarrhal or broncho-pneumonia, while in others it is more of the nature of fibrinous pneumonia. Further, it is to be remembered that, except in these fatal cases, the disease itself in its course and symptoms has no more similarity to croupous pneumonia than to typhoid fever, and that the pneumonia, when present, is always of the nature of a secondary complication, supervening on previous pulmonary weakness (age, previous disease, or a chill caught during convalescence from the primary influenza). It is, however, premature to make any further remarks about the matter until all the details concerning the microbe and the evidence as to its claims to be regarded as the microbe of influenza are made known. *Ibid.*

THE PREVENTION OF TUBERCULOSIS.—In the course of the debate which has been proceeding for some time past in the Academy of Medicine of Paris, and was concluded last week, there has been a republication of curious edicts and rules intended to prevent the spread of tubercular disease among members of communities. Thus M. German Sée drew attention to one of these edicts passed over a hundred years ago, namely, in the year 1782, when the King of Naples proclaimed as law: (1) That every physician in practice should be bound rigorously to furnish indications to the authorities as soon as he had discovered phthisis in any of his patients, and if he neglected this announcement should be amenable to a fine of one hundred ducats, and in case of repetition of the offense be condemned, without appeal, to banishment for ten years. (2) That the sick, after the discovery that they were suffering from phthisis pulmonalis, should be taken immediately to the hospital. (3) That the directors of hospitals should be obliged to keep separate the clothes and the linen belonging to the phthisical, with an inventory of all the cloths that had been worn by every individual certified as being tuberculous, and that after the death of such person the director or manager should prove

that all parts of the clothes were still present, any infraction of this part of the decree being punishable by imprisonment or even the galleys. (4) That the authorities should be empowered to renew the sick-chambers in which phthisical persons had been lodged, that is to say, the flooring of the chamber, the bedclothes and the hangings of the bed, and should remove and burn the windows and the doors and replace them by new ones. (5) That severe penalties should also be inflicted on those who bought or sold effects belonging to the phthisical. (6) That every house in which a phthisical patient died should be put under ban, and its proprietor be reduced to the loss of it.

These proscriptions, M. Germain Sée said, were only a copy of still older regulations which had been brought into force against the plague in former times; and the same rules were applied in Portugal. In the kingdom of Naples this law was applied in all its rigor until the year 1848, and what was the result? The result generally was an evil incalculable. What was the result to the sufferers from tuberculosis? Nothing. The rigorous application of the law for two or three generations to those who were the victims of phthisis proved that it was without the least effect. No Neapolitan or Portuguese physician could verify the slightest diminution of phthisis during all this time.

These, says M. Germain Sée, are the results of ignorance; ignorance of the laws which govern the transmission and spread of the most fatal of human diseases among civilized nations. And now what is the true knowledge which M. Germain Sée would have us accept? He himself is as rigorous as the King of Naples ever was in regard to rule and ordinance, only his rule is infinitely simpler, and is one which every nurse could follow without injury or annoyance to any one—a rule which we hope every English nurse does follow scrupulously. The rule is to do away with the sputum expectorated by the phthisical or to destroy it; then all is said that can be said if this rule be correct.

As will be inferred, M. Germain Sée is a valiant partisan of the school of contagionists. In his eyes heredity as a factor in phthisis plays a very inferior part; and if his points were altogether admitted, the part allotted to it would, at the best, be secondary. Take away, he would say, the cause, the source of contagion, and by the act you take away the heredity, since heredity itself requires a root from whence to spring. But he lays himself open to question by his op-

ponents when, in his zeal, he sums up the difficulties lying in the path of all true inquirers into primary causes by attributing every failure to ignorance of the hypothesis, or, as he designates it, the law of the transmission of the tuberculous bacillus. This is not just. It is but fair to assert that they who do not admit the premises of the contagionists are *not* ignorant of those premises. Opponents of the hypothesis may know the hypothesis as well as the contagionists themselves, but, knowing it, they may not accept the validity of it with such assurance of its certainty as to become convinced of its truth. They may see, in brief, so much evidence in favor of the older and longer recognized views that they feel bound to hesitate, and when they hear of such facts as are disclosed in the working of the edicts of the King of Naples they naturally may hesitate the more. In the English medical fields of controversy the battle on this subject has scarcely commenced in earnest. A good number of men, led into the contagionist camp rather by the novelty of the work there than by the satisfying character of it, have created an impression, and on the question of diagnosis have created an exceedingly strong impression. But the masses of the profession are still in doubt, and before the parasitic and transmissible nature of phthisis is so far proved that the hereditary nature of the disease may be put aside a generation of controversy of the severest kind must be carried out. And, in a matter so momentous, the labor of a generation is worth all the time and all the trouble, since, whichever side ultimately wins, the world at large, will, perforce, be the greatest gainer.

We have singled out the remarks of Prof. Sée in order to contrast, for the nonce, the two kinds of teaching on this important matter; but we propose shortly to review the whole discussion, which, it must be confessed, came to a rather impotent conclusion.—*London Lancet*.

EXALGINE.—In a discussion on exalgine in the Congrès International de Thérapeutique, M. Bardet reported on the results obtained in the Hôpital Cochin. From an examination of seventy-five observations he concluded that exalgine possesses remarkable analgesic powers, particularly in congestive and dental neuralgias, and in congestive migraines with pain above and below the orbits. He found it important, however, to employ real exalgine; that is to say, the *methylacetanilide*, which melts at 101°, because the isomers do not possess the same

properties. Thus in England there is a product sold under the name of exalgine which is *aceto-orthotoluid*, a very different substance in a therapeutic sense, as it is inactive, while even in the dose of 0.40 centigr. exalgine produces marked effects.

M. Féréol said that he had not obtained results equally favorable with those reported by M. Bardet; he had often been obliged to discontinue the remedy without having relieved pain, and in some cases he had observed cyanosis from its use. He prescribed it in the amount of 0.50 centigr. per day.

M. Desnos said that if the previous speaker had not obtained desirable results from the use of exalgine it was because the dose employed was too small. He himself administered as much as 1.50 grm. in twenty-four hours, and had secured relief in very severe cases of neuralgia; he had, however, also observed cyanosis from its use.

M. Dujardin-Beaumetz summarized the advantages and disadvantages in the use of the remedy. On the one hand, in many cases it removes pain and relieves obstinate neuralgias; on the other hand, when one is obliged to employ a large dose and continue the use of the remedy for some time, phenomena of vertigo make their appearance; and although these are unattended by danger, they require attention; furthermore, exalgine is insoluble. Exalgine in his opinion is a useful agent, but is inferior to antipyrin.—*Le Bul. Médical*.

BILLROTH ON THE TECHNIQUE OF RESECTION OF THE INTESTINE.—At the last meeting of the *Versammlung Deutscher Naturforscher u. Ärzte*, Von Eiselsberg remarked, in reference to resection of the cecum, that Billroth, after several unfortunate results in his cases, had resorted to a new method of operating. He found, indeed, that when it became necessary to unite the lower end of the ileum with a transverse section of the ascending colon an angular union sometimes formed, as a result of which in two cases there was complete stenosis of the gut. Billroth, therefore, closes up the lower end of the colon entirely, and, making a longitudinal incision higher up, joins the ileum at this point, and with the best results, for by this plan the natural relations are preserved, the ileum being at right angles to the colon.

THE TREATMENT BY SUSPENSION.—The literature on the treatment of locomotor ataxy and other degenerative diseases of the spinal cord by suspension is already voluminous, and the views held as to the mechanism and

the therapeutical value of the treatment are extremely contradictory. The most valuable of the recent contributions to the subject is one by Dr. Cagney on the Mechanism of Suspension, which he read before the Royal Medical and Chirurgical Society on the 14th of January, and which was discussed last Tuesday evening. It was hinted by Charcot, and assumed by his disciples, that the good effects observed were due to the forcible stretching of the spinal cord and nerve roots. By means of carefully devised experiments and accurate measurements both on the living body and on the cadaver, Dr. Cagney is able to show that the effect of suspension is to straighten the curves of the spinal column, in this way producing a total shortening of the spinal canal. This is well marked in the cadaver, and is probably greater in the living subject, owing to involuntary muscular contraction. In his inaugural address at the University of Aberdeen Prof. R. W. Reid stated that his measurements had led him to the same conclusion. The effect is most marked in the dorsal curve, where distinct relaxation of the cord can be seen to take place. In the cervical region there is slight stretching of the dura mater, which is probably not sufficient to influence the spinal cord. Whatever good, therefore, has resulted from the treatment can not be regarded as due to stretching of the cord. Dr. Cagney offers the suggestion that the apparent good effects are due to the breaking down of adhesions between the fibers and to the removing of impediments to the circulation, both of which explanations are entirely hypothetical and not altogether probable. Since the effect on the cervical region of the cord is practically *nil*, and suspension from the head is dangerous and inconvenient, he submits that the best results might be expected from suspension from the armpits only, or from suitable gymnastic movements. The main points in the discussion related to the dangers and discomforts of the treatment. Several of the speakers mentioned cases where vomiting and syncope had been set up. This occurs even with healthy persons. One of the speakers who had been suspended by Dr. Cagney for one minute, although in perfect health at the time, experienced great pain, and fainted on being let down, and continued in a fainting condition for an hour. In the carefully recorded series of cases recorded by Drs. Taylor and Russell in the *Lancet* of October 19, 1889, epigastric pain, nausea, and syncope were produced by the treatment in several individuals, and they were

also apparently the cause of death in a case recorded by Dr. Borsari, of Modena. It was observed by Dr. Cagney that the splanchnics could be seen to stretch in the process; and he suggests, with great probability, that it is to this stretching that we must ascribe these accidents. If this be so, however, suspension from the axillæ alone will be as likely to cause them as the combined cervico-axillary method usually employed. The question of the therapeutical value of the practice was not touched on by the paper. We understand that it will be the subject of the discussion at the forthcoming meeting of the Neurological Society, and for the present we postpone any remarks on that subject.—*London Lancet*.

MILK DIET IN CARDIAC DISEASE.—A critical paper on the value of absolute milk diet in heart disease has been published by H. Högerstedt. Urged by the objection brought forward by F. A. Hoffmann, in his discussions upon total milk diet, that there are no reliable recorded histories where the milk regimen has been pursued in a strictly scientific manner, the writer describes fully a carefully followed out case, from the Dorpat clinic, of pure mitral stenosis, in which Karell's total milk regimen was repeatedly followed with excellent results. From the circumstance that pure mitral stenosis, where there is commencing failure of compensation, opposes the utmost difficulties to therapeutic treatment by the ordinary cardiac remedies, the author believes that he had a peculiarly favorable opportunity of judging of the influence of pure milk diet upon the action of the heart. The case observed was in an advance degree of failure of compensation. Digitalis, tried after complete failure with calomel, was of no service; caffeine also had no effect; there was no tonic action upon the heart, and the state of the patient was extremely serious from the general venous congestion and weakness. On the contrary, the result with total milk diet, after six months' observation, twice repeated, was most striking. The highly favorable action on diuresis and pulse became evident as early as the fourth and fifth day after the commencement of exclusive milk diet, and at the same time there supervened a remarkable diminution of congestion and a general improvement in the condition of the patient. From experiments made under different dietetic conditions, the author was able to draw up the following table:

Absolute milk diet: Diuresis rapidly in-

creases and remains great; albuminuria rapidly diminishes and di-appears; pulse becomes less frequent until it reaches and falls below normal; congestion diminishes and disappears; general condition improves surprisingly.

Milk diet principally: Dinresis gradually falls; albuminuria steadily increases; pulse very gradually increases; congestion very slowly increases; general condition gradually worsens.

Full diet: Diuresis very slight; albuminuria remains constant; pulse remains high; congestion reaches a high degree; general condition bad.

It is important to insist upon gradual increase of the amount of milk taken, and to give it in small quantities (Weir-Mitchell). As regards the difficulties to be encountered in the carrying out of repeated cases of the milk regimen, the practitioner must not yield, but continue firm. Though, according to Hoffmann's experiments under other conditions, an absolute milk diet is undoubtedly hunger diet, yet in the case of the sick kept from working and needless loss of heat, as among children, it may become a growing diet. Indeed, we possess in total milk diet, in so far as pathological and anatomical conditions do not prescribe limits to us, a remedy for failure of compensation in cardiac disease which can favorably influence the power of the heart and the blood formation, even when reliance upon every medicament must be altogether doubtful.—*Med. Chir. Rundschau, London Practitioner*.

PAROXYSMAL TACHYCARDIA.—Brieger has published an important contribution to our knowledge of suddenly supervening tachycardia, with the *post mortem* results. A woman, aged thirty-three, eleventh of her family, suffered from her ninth year from violent attacks of palpitation and dyspnea, occurring at intervals of from six to ten weeks to one to nine days. For a year acute pain had been felt in the cardiac region during the attacks, which were further characterized by orthopnea, cyanosis, respiration increased to 48, a fall of the body temperature to 95.7° F., and cardiac frequency of 250 per minute. Nothing abnormal could be detected in the lungs. Cardiac examination yielded equally negative results, with the exception of an occasional faint diastolic murmur over the aorta. Under the use of stimulants during the next twelve days, the frequency of the pulse fell. Pressure in the right ovarian region, compression of one vagus, electrization of the

precordial region, caused cyanosis and slowing of the pulse. In four days the patient was able to be discharged cured; but she returned to the hospital in two months with the same serious symptoms. On this occasion they persisted, and ended fatally. In five days jaundice came on; four days before death there was rise of temperature, with infiltration of the pulmonary bases. During the last hours of life the pulse was 180, respiration 36. Digitalis and morphine were without effect. *Post-mortem* examination revealed myocarditis fibrosa of the left ventricle, dilatation of the left heart, parietal thrombosis of the left ventricle and right atrium, pneumonia of both lower lobes, hemorrhagic infarction of the lungs and the left kidney, thrombosis of the right jugular vein, and red-brown atrophy and fatty infiltration of the liver with jaundice. This affection appeared to depend upon paralysis of the vagus, the sympathetic also being involved. Of the thirty cases of paroxysmal tachycardia to be found in the literature of the subject there are only two examined after death. The naked eye and histological investigation of the vagi yielded negative results.—*Charité Annalen, Practitioner.*

TREATMENT OF PLEURITIC PAIN.—Otto, of Dorpat, describes a method of treating the pain met with in pleurisy which he has used for some years. This is partial compression of the thorax. He does not claim that it is applicable to every case of pleuritic pain, but says that it is necessary that there should be no great degree of deformity of the thorax; and further, that its elasticity should be within the physiological limits. The compression is carried out by a bandage three inches broad, which is applied around the chest at a height corresponding to the seat of pain, and with sufficient firmness to place a restriction upon the inspiratory movements of the compressed ribs. He has tried elastic bandages, but has discarded them for cotton material. The process of bandaging is commenced in the axillary line of the sound side and carried tightly round the thorax in an overlapping double row. The end of the bandage is firmly fixed to the first part with a safety pin, the patient being allowed to expire moderately before doing so. When the bandage is so applied, the patient at first always feels the pressure very constricting, but after a few minutes he becomes quieter and the breathing more regular; the catching pain ceases, and he finds that he is able to take a deeper inspiration with comfort. Otto remembers only

one case in which the patient insisted on having the roller removed, but after this was done he felt so much more pain that he begged to have it re-applied.—*Berlin klin. Wochens., London Practitioner.*

THE BACTERIOLOGY OF INFLUENZA.—We have now before us the original preliminary communication (*Wiener Medizin. Blätter*, No. 4, xiii) by Dr. Maximilian Jolles, the reputed discoverer of the microbe of influenza, and well might we exclaim, "*Parturiunt montes, nascitur ridiculus mus!*" After all, the dust raised about the discovery of the microbe of influenza vanishes into air on perusing the statements made by the discoverer himself.

Dr. Maximilian Jolles is the co-proprietor of a private "chemico-microscopic laboratory," evidently devoted to the examination, chemical and microscopic, of sputa, urine, etc., sent for the purpose of diagnosis by medical men. The work on influenza was, therefore, not carried out in the Vienna Bacteriological Institute, and was not superintended by Professor Weichselbaum. In justice to Dr. Jolles it ought to be stated, however, that he himself protests against being forced, by the untimely and exaggerated accounts given by the daily papers, to publish a preliminary abstract of his observations, these being as yet far from concluded, and therefore not allowing any definite conclusion to be drawn from them.

In examining sputa from patients who had previously suffered from influenza, he was repeatedly struck by the presence of numerous capsulated cocci, resembling Friedlander's so-called pneumonia bacillus. Although aware that other reliable observers had demonstrated the presence of this microbe in normal sputum and in various normal fluids, yet Dr. Jolles insists on the fact that in the specimens of sputa sent to him the bacillus of Friedlander was present in considerable numbers, though he also adds that other bacteria—bacilli, pus cocci, and streptococci—could be demonstrated.

By culture on gelatine Dr. Jolles isolated the capsulated microbes, and ascertained that, both as regards the manner in which they stain with different dyes, and as to their cultural characters, they resemble Friedlander's microbe. He found the same capsulated cocci in the urine of a patient suffering from acute purulent cystitis, and also on one occasion on which Vienna drinking water was subjected to bacteriological examination he found in it also, besides various other species of bacteria, this particular species of capsulated coccus. Lastly, two rabbits were inoculated with the cultures; one of them showed no result, the other died on the fifth day from septicemia.

These are all the facts observed by Dr. Jolles, and it must be clear that of the discovery of the microbe of influenza there is really very little evidence, if any. In the first place, the assumption made by Dr. Jolles that Friedlander's bacillus has a casual relation to pneumonia has been, as far as croupous pneumonia is concerned (and it is for this pneumonia that its etiological importance had been asserted by Friedlander and others), abundantly disproved, since this microbe is present in various conditions in no way related to pneumonia; for example, normal sputum, the normal fluid of the mouth, etc.

In the second place Dr. Jolles' argument, that because in some cases of influenza one kind or another of pneumonia supervenes on the primary attack, one of the species of microbes present in the sputum of such pneumonia might be and probably is the microbe of influenza, is faulty in logic as well as in fact. We have already pointed out in the last number of this journal that the pneumonia following some cases of influenza is not of a uniform character and is evidently a secondary complication, and therefore the microbe, even if proved to be the cause of this pneumonia, need not necessarily be the organism of the primary disease, that is, of the influenza. The demonstration of the microbe in a sufficient number of cases of influenza during the early stages of the disease must be the very first and preliminary step. This, however, has not been taken.

To all those interested in the discovery of the nature and causes of epidemic diseases—and none can and ought to be more so than the general public—the publication of incorrect, misleading, and exaggerated accounts, such as were telegraphed on the subject of the discovery of the microbe of influenza from Vienna, and appeared in Vienna, London, and elsewhere, must always remain a regrettable incident.—*British Medical Journal*.

CONGESTION OF THE LUNGS.—Dr. Wilks has done well to call attention to the laxity with which the phrase "congestion of the lungs" is employed, and there is much truth in his satirical comparison between the prevalence of this mysterious affection and the social status of the sufferer. Those who employ the term mean by it to affirm that there is an acute disease of the lungs which is of great gravity, and is associated with high fever, a condition independent of any other affection; in fact, a disease *sui generis*. But, singularly enough, the pathologist rarely meets with such congestive hyperemia, unless it be collateral or combined with inflammatory changes in the bronchi or the lungs, the congestive state with

which he is most familiar being that known as passive hyperemia, from obstructed circulation due to failure of the left side of the heart to empty itself, whether this latter depends on valvular disease or on muscular weakness. Strictly speaking, too, the conditions found after death are those of "edema" mainly; the effects of congestion, and not congestion itself. Almost the only condition of active pulmonary congestion of which there is any thing like positive proof is that which forms what is called the "first stage" of pneumonia, where every thing points (clinically) to vascular engorgement. Is it not, then, time to discard the use of a term which, if it means any thing, means pneumonia? The nomenclature of the Royal College of Physicians does not recognize any such affection as "congestion of the lungs" of the type alluded to, and in this it is consistent with pathological teaching. *Lancet*.

ENTERITIS AND ENTERO-COLITIS.—Catarrh of the stomach and catarrh of the bowels, acute and chronic, constitute the principal factors in infantile mortality during the summer months.

The successful therapeutics of enteritis includes, first, saline purgatives, preferably Rochelle salts given freely; next, oleaginous purges. Whenever purgatives are omitted as an initial treatment in enteritis a very bad start has been made which will necessitate a return to it later with less positive advantages.

Sulph. magnesiae..... $\bar{3}$ ss;
Inf. rosarum co. U. S. P..... $\bar{3}$ iv;
Tr. opii..... \mathfrak{M} viii.

M. Ft. Sig: Take a teaspoonful every two hours. For an infant of one or two years.

If further treatment be necessary the following is successful in the largest number of cases:

Acid. nitrosi $\bar{3}$ ss;
Tr. opii..... \mathfrak{M} .xx;
Syr. zingiberis..... $\bar{3}$ i;
Aqua camph..... $\bar{3}$ iii.

M. Ft. Sig: Teaspoonful every two hours.

As soon as the disease assumes the chronic form without fever, which it will not do if treated as above, nitrate of silver as follows is invariably the best treatment:

Argent. nitratis..... gr.ii;
Tr. opii camph..... $\bar{3}$ ii;
Syr. acacie $\bar{3}$ i;
Aqua camph..... $\bar{3}$ ii.

M. Ft. (black bottle) Sig: Teaspoonful every two hours.

For attacks accompanied by gastric symptoms, properly called gastro-enteritis, with the characteristic malodorous stools, carbolic acid with chlorate of potassium in distilled water is a wonderfully good prescription, also salol in two to five-grain doses; beta-naphthol and small and frequently repeated doses of calomel or a solution of bichloride of mercury in very small doses from $\frac{1}{80}$ to $\frac{1}{120}$ grain, also a very dilute solution of the biniodide in solution of the latter often acts like a charm in $\frac{1}{60}$ grain dose.—*Dr. J. A. Larrabee, N. E. Med. Mo.*

MICRO-ORGANISMS IN WATER.—There is a difference of opinion among many chemists as to whether the presence of a large quantity of bacteria or a considerable amount of organic matter in drinking water justifies as such its condemnation. Waters containing few bacteria and little organic matter have been known to produce distinctly injurious results, while some waters containing much of both appear to be comparatively harmless in their action. Of course, very much depends upon the source of the water and the nature of its surroundings. The fact, however, that organisms believed to be agents in bringing about certain diseases exist in water for a long time, during which their activity is preserved, makes their absence distinctly desirable. Certain operations in nature would seem to indicate this. Investigations have shown that more bacteria are usually present in rivers than in lakes, in spite of the fact that lakes themselves in many cases are more or less polluted by rivers passing through populous towns. In a very interesting paper in the *Zeitschrift für Hygiene*, 1889, No. 86, B. Krüger considers that this rapid decrease in the number of organisms may very possibly be due in part to the action of direct sunlight, but in the main to the tendency of water in a comparatively undisturbed state to deposit and precipitate. He therefore carried out a number of experiments with a view to determine how far the removal of organisms was brought about by the mere mechanical deposition of inert matter and also by precipitation as a result of chemical action. The mechanical precipitants employed, all in a state of fine powder and sterilized, were alumina, brick-lust, clay, chalk, sand, coke, and charcoal. Water obtained from an ordinary service pipe was impregnated with a liquid containing bacillus growth of a species incident to tap water. This was divided into two portions—one for precipitation with the inert substance and the other

untreated for the sake of comparison. Experiments were similarly carried out in which precipitation was obtained as the result of chemical action such as is brought about by the addition to the water containing naturally lime, magnesia, etc., substances like wood ash, sulphate of alumina, and slaked lime. The general conclusion came to by the author from the results obtained is that undoubtedly large numbers of bacteria are carried down by inert substances merely sinking in the water, but that the action is very considerably increased when, in addition to mechanical deposition, a chemical precipitation also takes place. The corollary is evident—inert substances do mechanically assist in the precipitation of micro organisms, but preference should be given to chemical treatment.—*Lancet.*

PULMONARY HEMOPTYSIS.—M. Vidal recommends treating pulmonary hemoptysis in phthisical patients with ipecacuanha and antimony, or kermes (oxydum stibii sulphuratum rubrum) in small doses every ten minutes. If this does not completely arrest the hemoptysis, M. Vidal counsels applying Gounod's cupping glasses or ligating a limb. When fever is present, two grams of ergot of rye and one gram of sulphate of quinine divided in four doses, to be taken every three hours, M. Vidal has found successful, but condemns the use of iron or arsenic, generally considered good in treating hemorrhage.

THE TREATMENT OF ACUTE CATARRH OF THE RECTUM.—Quite frequently the practitioner of medicine sees cases in which the entire list of remedies generally found of value in the treatment of diarrhea have proved useless or merely palliative in effect. While they may control the frequent movements of the bowels for a time, the trouble reasserts itself as soon as the medicine is withdrawn; at the best in a somewhat modified form. Careful inquiry will show, in such cases, several points of value as to diagnosis and treatment. The attack has probably been preceded by a few days during which there has been a sensation of weight and fullness in the rectum and about the anus; following this, a sensation of bearing down asserts itself, accompanied by violent pain referred to the region of the stomach or small gut. So severe is the pain in its paroxysms that the patient may cry out with it and the perspiration break out over the body. At first small passages may occur, but after a few stools they consist of wind and a few drops of mucus, which are expelled after a period of agonizing pain and

tenesmus. Opium makes the state ultimately far worse than before, and nearly all astringents are valueless. Under these circumstances small doses of chlorate of potash injected into the rectum are most serviceable, only one or two injections being necessary in some acute cases to produce a cure. A saturated solution of the potash in water should be employed and about half a tumblerful injected each time, very slowly without force, and retained for ten or fifteen minutes. Large injections will cause pain and expulsion of the liquid, and no result will be attained.—*Medical News*.

SOMNAL, A NEW HYPNOTIC.—Radlauer, of Berlin, has introduced a new combination to which he has given the name "somnal." This substance is composed of chloral, alcohol, and urethane, and is said to be a true chemical compound, and not merely a mixture. It is therefore different from the "chloral-urethane" which has been used for a year or more, by alienists and nerve specialists, and which has been considered by some of them both safe and reliable. The *British Medical Journal* says that somnal occurs in clear, colorless crystals, having a slightly bitter taste and being readily soluble in water and in alcohol. It is given in doses of thirty grains, and sleep is produced in thirty minutes. The sleep is described as sound and natural, lasting from six to eight hours, and followed by no unpleasant effects. Somnal does not disturb the digestion, has no influence over the pulse or temperature, and, in fact, has the excellent qualities of both chloral and urethane without their disadvantages. Favorable experience with the drug is said to have been reported from the hospitals of Berlin and Moscow.—*N. Y. Med. Journal*.

IS THE GASTRIC JUICE A GERMICIDE?—Drs. Straus and Wurtz have conducted a series of experiments in order to ascertain the action of the gastric juice on the bacilli of tubercle, charbon, typhoid, and cholera morbus. The juice from man, dogs, and sheep was selected for the experiments. It was found that digestion for a few hours at a temperature of 100° F. destroyed all the germs. The bacillus anthracis was killed in half an hour, the bacillus of typhoid and cholera in under three hours, while the bacillus of tubercle bore digestion for six hours, under which time it was still capable of provoking general tubercular infection. Even when digested for from eight to twelve hours the bacillus was still capable of producing a local tubercular abscess, not followed by general infection. Over twelve hours' digestion destroyed it completely. The germicide influence of gastric juice appears to be due to its acid

contents, as it was found that hydrochloric acid alone, dissolved in water in the same proportion as it is in gastric juice, proved as active a destroyer of the bacilli. The pepsin appears to have no influence on the germs. MM. Straus and Wurtz, who publish their researches in *Archives de Médecine Expérimentale*, wisely remind their readers that the germs, when protected by animal and vegetable tissues and introduced into the stomach in ordinary nutrition, are not exposed to so direct and prolonged action of the acid constituents of gastric juice as in these experiments.—*British Med. Journal*.

BACILLI IN LANDRY'S PARALYSIS.—A study of interest has recently been made in the Pathological Institute at Bologna by Dr. E. Centanni (*Riforma medica*, 1889, No. 161; *Centralblatt für klinische Medizin*, November 30, 1889) upon the infectious nature of Landry's disease. He had the opportunity of making an anatomical examination of a typical case of acute ascending paralysis, and found the lesion to be an acute interstitial neuritis, with some tendency to affect the spinal cord indirectly. Furthermore, a bacillus of peculiar character and in typical localization was observed in large numbers in all the peripheral nerves, when subjected to staining with methylene-blue borax, according to Sahli's method. The germ is cylindrical, rod shaped, with round ends, about 1.2 micro-millimeters in length, without spores, and showing no tendency to any particular form of aggregation. It is found almost exclusively in the endoneurial lymph spaces surrounding the sheath of Schwann, and not elsewhere in the nerves or muscular system.—*N. Y. Med. Journal*.

DIAGNOSIS OF CEREBRO-SPINAL MENINGITIS BY PUNCTURE OF THE LIVER.—Dr. C. Bozzolo reports a case of cerebro-spinal meningitis, in which the diagnosis was assisted by bacteriological observations made on the fluid obtained by puncturing the liver. A man, aged fifty four, who had been ill for five days previously, was admitted into the clinic at Turin suffering from feverishness, pain in the right side of the neck, jaundice, enlargement of the spleen, painful enlargement of the liver, bronchitis, and albuminuria. A rigor occurred more than once. Except the pain in the neck and vomiting, no symptom whatever of meningitis existed. Six days after admission the patient died, having been slightly delirious for the previous forty-eight hours. Diagnosis being difficult, the author had on the fourth day after admission made an exploratory puncture

ture of the liver, which was still painful. The blood extracted showed by cultivation and after experiments on animals the existence in it of Fraenkel's diplococcus of pneumonia. This result, in the absence of pneumonic and pleuritic symptoms, with the existing pains in the neck and vomiting, encouraged Bozzolo to diagnose meningitis, a diagnosis which was confirmed by the *post-mortem* examination. In addition to the morbid changes in the meninges, gall stones and acute endocarditis were found.—*Lancet*.

PILOCARPINE IN ECLAMPSIA.—Pilocarpine may be said to be on trial as a remedy in the dreaded convulsions of puerperal eclampsia, and it is important to note the results which are from time to time reported by competent observers. On the whole, the reports are decidedly favorable, and a case recently published in a French contemporary shows clearly enough that in certain cases the drug may be relied upon to conjure the attack. In this particular case the attack had come on during labor, and was not relieved on the evacuation of the contents of the uterus; indeed, the condition of the patient on the following day was simply desperate. The injection of a third of a grain of pilocarpine at the critical moment is reported to have produced a most remarkable effect. After an abundant diaphoresis lasting over half an hour, the pulse returned in the radial arteries and the surface temperature was restored. No further convulsions occurred, and in the course of a day or two the injections continued night and morning, albumen disappeared from the urine, the patient becoming convalescent. The effects were too clear and too prompt for the results to be attributed to any other influence, and the remedy is one which should always form part of the *armamentarium* of the obstetric physician.—*Med. Press and Circular*.

HOW TO LOOK FOR TUBERCLE BACILLI IN SPUTUM.—Ehrlich's method, somewhat modified, is as follows: Press a little of the suspected sputum between two cover-glasses so as to get a very thin layer. Dry the cover-glasses separately, either by moving them through the air or holding over a flame or by passing a few times through the flame. This fixes and dries the preparation. Place some drops of aniline oil in a reagent glass half filled with water, shake, and filter into a watch glass. Add several drops of an alcoholic solution of fuchsin or methyl violet to the contents of the watch glass till they are markedly colored. Warm this mixture till it begins to smoke. Place the cover-glass with the dried sputum face down-

ward on the warm liquid and let it float from three to five minutes. Remove and rinse in alcohol, acidulated with nitric or hydrochloric acid, until very slight traces of color remain; then rinse in ordinary alcohol (seventy or eighty per cent). Dry the cover-glass as before by holding above a flame, clean it where necessary, add a little pure glycerin and set under the microscope. An enlargement of four hundred diameters will show the bacilli if present.—*Col. and Clin. Record*.

INTERMITTENT FEVER.—Dr. Alois Fénykövy communicates to a Vienna medical journal an account of some observations made on the treatment of intermittent fever by means of friction of the back along the spine. Many years ago, while at Nisch with his regiment, there occurred so many cases of intermittent fever that the stock of quinine was becoming exhausted, and in order that the patients might not be entirely without some sort of treatment it was ordered that they should be rubbed twice a day along the spine with simple ointment. The day after this order had been given it appeared that the usual attack had not come on; accordingly, since that time Dr. Fénykövy has very frequently employed this treatment, and usually with marked success. Indeed, he says that three fourths of his cases have done very well without any quinine at all.—*London Lancet*.

TRISMUS FOLLOWING VACCINATION.—It is reported that at Bromly recently an infant who had been vaccinated in September, at the same time and with the same lymph as six other children, had died of trismus, which had supervened upon inflammation of the arm. With the scanty details at present forthcoming, it is impossible to pronounce upon the case as to the possible connection between the vaccination and the trismus, an association which has, we believe, never been hitherto recorded. In such a case the need of a *post-mortem* examination is obvious, in order to exclude meningitis, which might have produced the symptoms in question.—*Ibid*.

DETECTION OF PUS IN THE URINE.—Drop into the specimen of urine enough tincture of guaiac to give it a milky appearance, and heat it a few minutes to 100° F. If pus is present a blue tint will develop. Otherwise the urine may be passed through a white filter, on which is then allowed to fall a few drops of tincture of guaiac, producing, if pus is present, a distinct blue discoloration.—*Pharma. Era*.

The American Practitioner and News

"NEC TENUI PENNĀ."

Vol. IX. SATURDAY, MARCH 1, 1890. No. 5.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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UNIVERSITY OF LOUISVILLE.

The Fifty-third Annual Commencement of the Medical Department of the University of Louisville was held in Macauley's Theater on Friday, February 28, 1890. The occasion was of unusual interest, in that it was the celebration of the conferring of the degree of M. D. upon the largest number of students ever graduated from the school. The Doctorate Address was delivered by Prof. J. M. Bodine, for twenty-four years Dean of the Faculty, and an indefatigable laborer in the cause of medical education.

The Louisville Courier-Journal, issued on commencement day, bears testimony to the Dean's worth and work in the following sketch:

"The close of this session completes Dr. Bodine's twenty-fourth year as the Dean of the Faculty. During this time he has never missed a lecture. He has been through many school storms, but every storm was calmed and affairs worked more smoothly than before. Although the doctor is fifty-eight years of age, he looks years younger, and is as sprightly as he was twenty years ago. Dr. Bodine graduated from the Kentucky School of Medicine in 1854. Soon after he began lecturing before the classes of the Kentucky School, and in 1865 accepted a position as professor in the

University. During that session he was made dean, and, though he has tried to resign several times, he was never able to get out of the office, his resignations being always rejected by a unanimous vote of his colleagues. It has been many years since he was heard at the commencement exercises, and the announcement that he will deliver the Faculty Valedictory this afternoon will bring his friends out in full force."

The address, the full text of which appears elsewhere in this issue, discusses the problem of the doctor's life in the manner of a philosopher, with dignity, with sincerity, with eloquence, and with grace. It was fit that the largest class ever sent forth from the University should hear such words of counsel and good cheer from the lips of him whose love and labor have contributed so largely to the glory of the school.

The degree of M. D. was conferred by the Hon. James S. Pirtle, President of the Board of Trustees, upon the following gentlemen:

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Paschall, G. C., Tenn.	Wasson, W. B., Mo.
Paul, Robert A., Tex.	Young, Samuel, Tenn.
Parker, W. H., Ky.	Young, James F., Ky.
Parker, John H., Ky.	Total, 145.

The Class Valedictory was delivered by Philip H. Stewart, M. D., of Kentucky. He said:

"I ask you to join me in inquiring what course of self-training we shall enter upon in order to realize the greatest advantage for ourselves and for the society of which we shall form a part.

"Something might be said of preparation for the social and political upheavals that are already quick in the womb of time. The most casual observer can not fail to perceive that the restraints and guides that have come down to us from the slumbering past are ill-adapted

to-day to control the chariot of progress and civilization, before whose wheels are harnessed all the forces of nature. The world of thought must undergo such readjustments as are paralleled only when the solid crust of the earth adjusts itself to its varying interior. Superstition must be driven from the face of the fair earth, while grasping monopoly and legalized robbery must be taught that in this age of thought and self-assertion no form of slavery will be long endured. But it is not of these questions I would speak; nor directly of our prospects for success as doctors, while the vexed problems involved in wealth and fame each must solve, or attempt to solve for himself. My theme is this: What accessory studies ought a physician to pursue that he may attain the highest degree of efficiency in his calling?

"It is not to be pretended that in our calling we are to take no thought of the morrow. 'The laborer is worthy of his hire.' 'Without eating and drinking the hero is nothing.' Nor should we forget, as my Lord Bacon says, that 'Knowledge flies best with some feathers of ostentation.' What may a doctor study beyond the mere letter of the text-book that may give him increased mastery of disease? If the workman is to be a mere machine, he will be most efficient who attempts but a single task. *Ne sutor ultra crepidam* does not apply even to shoemakers with logical fitness, much less can it apply to him who essays a great profession.

"Intelligence means to gather by selection, and he who has the most extensive control of selected facts is the man of the largest intelligence, whatever may be his calling. The man who possesses enlarged views of the multiform aspects of nature will be least likely to descend from thought, which is the labor of the intellect, into dreams that are but its pleasure, and all exercise that implies intellectual exertion does good, at least to the strong; for the mind, like the body, is made stronger by hard exercise. The doctor who never goes beyond his medical books and journals for reading, who never goes beyond the sick-room for observation, will so cramp his mind and dwarf his faculties that even in medicine he will deceive himself and mislead others.

"The doctor should know enough of the languages to trace out the origin of any word he may meet in his studies, for this is usually the quickest and often the only way to arrive at the true meaning of terms.

"Beyond men of every other calling the doctor should be grounded in logic, since the right practice of medicine is a process of reasoning from beginning to end. The lawyer at the bar, the preacher in the pulpit, the editor in his sanctum, stands not so much in need of sound reasoning as the physician. Of these, one may find his interest lies in making the world appear the better cause; another may be required merely to dispense established dogma, and still another may find that success is to be found only in trimming to popular caprice or in cringing to party power. But the doctor's duty is always to seek the truth by processes of unhampered reason. Indeed, every hour he has need to be the philosopher as well as the physician.

"Second only to this in importance is a knowledge of physics, and along with it that higher form of physics, 'The Science of Mind.' The wider our acquaintance with the workings of nature, the wiser will be our choice of measures and the better our understanding of results.

"Abercrombie's great work on the intellect and that splendid text-book, 'Daniel's Physics,' were but courses of lectures delivered to classes of medical students in the University of Edinburgh in the days of our fathers. If such knowledge was deemed essential to the intellectual outfit of the doctor of fifty years ago, and made no small part of the scholarly attainment of such men as Simpson, Keith, Bromwell, Hart, Gardener, and Aitken, it may be fitly asked if the student of to-day can afford to ignore them.

"By bringing into medicine the clear methods that investigation in other branches of knowledge make use of, we can judge with more correctness of the precision or incorrectness of our diagnosis, and the worth or worthlessness of the measures whereby we essay to combat disease.

"It is the verdict of good judges that nothing has brought so much discredit upon medi-

cine as the delusions and hobbies that have one after another risen with boastful front, and chased each other through the gauntlet of ridicule into merited oblivion. The conceits of ancient and medieval times have had their day and are forgotten, but this age has witnessed its full share.

"To know whether others have gone wrong, we must have a judgment independent of theirs. To avoid being carried away by the medical delusions of others, we must lift the veil from our own eyes and take our bearing by the light that beams from stations that rest on the rock of true science. Medical truth, like all other, is ever the same and eternal. Crazes and fashions are but poor interlopers, and should be relegated at once to the realm of quackery. To him who has that mental equipoise which only learning and culture can give, these fads of the foolish are but sounding brass or tinkling cymbals. It is safe to say that nine tenths of all that is valuable in science and in medicine have been supplied by men of broad learning.

"But if perforce the scope of our attainment be circumscribed, let us at least lend an encouraging countenance to others who are pursuing studies that ennoble and enrich our profession. Such unfortunately has not been the rule in past history. Harvey lost largely of his practice, and would most likely have been crushed, had not King Charles publicly recognized his eminent worth. Jenner was almost buried under a load of obloquy because of his discovery. We are fallen on better days. The old fogies still croak, but the microbe has come to stay, and it is the glory of our time that men like Koch, Pasteur, and Sternberg pursue their studies under government patronage and professional encouragement. The fogies croak, but the time is passed when a man is regarded as wise in medicine for no other reason than that he is an ignoramus in all things else.

"Fellow students, our college days are over: school-life with its pleasures must be left behind; manhood with its many arduous duties must be embraced. We stand to-day "where the brook and river meet," and, gazing down on the billowy or placid bosom as it spreads out

before us, we see many wrecks around which we hope to safely pilot our bark. On each side lie the flowery, fragrant banks of pleasure toward which we may be often tempted to drift; but look ahead, and we shall see that golden harbor of truth and prosperity for which we now set sail. No doubt we have often wished it in our power to reach out into the future, to take the seemingly lifeless hand and make it the joyful, throbbing present. To-day that wish is gratified, and as we say good-bye we know we speak and see each other as a class for the last time. When to-morrow's sun shall light and warm the earth we will be separated and our faces turned homeward. But whatever shall be our fortune in life, it will ever be our sweetest pleasure to revert to the bright years passed under the fostering care of our *alma mater*.

"Professors, as we turn to say good-bye to you, we do so with mingled sentiments. We are glad that our college days are over, for we can now return to those who love us and await our coming, can go forth as loyal servants of our profession, seeking only such pleasures as arise from duty done.

"The instruction which you have given us is and must be one of the elements of our lives. As on the pathway of life we meet, battle face to face and conquer our enemy, disease, it shall be our pleasure to look back and bless you one and all for the armor with which you have equipped us. Doubtless you may feel that many of the truths which you have tried to impress upon us have been sweetness 'wasted on the desert air,' but it shall be our best endeavor to show you that they were in truth bread cast upon the waters, to be gathered after many days.

"Friends of the University, by which I mean citizens of Louisville, we thank you for many favors. Whatever has gone to make our stay in Louisville both profitable and pleasant is due in no small measure to your kindness and hospitality."

The position of resident physician to the Louisville City Hospital was won upon a competitive examination by Robert W. Schoenle, of Kentucky.

The young men go bravely forth to enter

upon the checkered life of the physician with the good will of the community and the blessings of their *alma mater*.

HIGH TRAGEDY IN ANATOMICAL CIRCLES.

The cities of the Falls have this week been treated to a great sensation through an unsuccessful attempt on the part of some young teachers of anatomy to procure material upon alien soil. Two Louisville physicians of unimpeachable character, through the indiscreet overconfidence of one of them, were drawn with their two colored servants and an unknown confederate into an ambuscade on the night of February 24th, in a cemetery of New Albany, Ind. The result was a surprise, a flight, a shot, the death of one servant, the escape of the confederate, and the arrest of two doctors and the other servant.

The physicians were admitted to bail by due process of law, and the negro buried; while great local excitement prevails and public and professional opinion of the affair are finding varied expression, according to the point from which the tragedy is surveyed. Comments upon the occurrence would avail little at this time; but if we were called upon to set forth a few aphorisms for the benefit of the coming anatomist, they would run somewhat in this wise:

1. Don't seek for subjects in high-toned graveyards.

2. Don't lift bodies from the graves of those who have friends to be shocked at the seeming desecration.

3. Don't give away your schemes to strangers.

4. Don't operate in any State whose laws make grave-robbing a penitentiary offense.

The gentlemen implicated are seemingly in an ugly strait, and have our best sympathy in the trial to which the unfortunate affair has put them. But we believe that time will give the offense due condonement, and make their punishment at the hands of the law a bagatelle.

MR. SAMUEL COULSON, for twenty-five years a printer in the publishing house of John P. Morton & Co., and foreman of the printing department since 1876, this week leaves his post for what he believes to be a better thing.

He was in at the birth of each of the two journals which now make the American Practitioner and News, and we had hoped that he would be able to arrange for the setting up of the obituaries of its editors, if not that of the journal. We owe him much for helping us out of many a chirographical and typographical tangle, and wish him success in his new venture.

It may be truthfully said of Mr. Coulson that, in an experience of more than fifteen years with medical editors and writers, he never whipped an author or pied a form.

Notes and Queries.

CHEMISTRY AND ITS RELATION TO MEDICINE.—Among the remarkable developments of medical science in recent years is the important position assigned to chemical discoveries and theories, and their relation to practical medicine. For many years the aphorism of Boerhaave, "*Chymia, egregia ancilla medicinæ, non alia pejor domina*," defined the position chemistry ought to hold in its relationship toward scientific medicine—an aphorism which in more recent times has received point and force from the ridicule cast upon chemical theories by the teaching of Graves and Tronseau. Now, however, chemistry promises to play once more a dominant part in the medical theories and speculations of the day, and, under more competent guidance than was possible when the aphorism was originally launched against the iatro-chemists of the seventeenth century, will, it is to be hoped, avoid the errors of the past, and solve many important problems urgently requiring elucidation. As evidence of this reaction in favor of chemical speculation, we need only point to the chemical investigations being carried on at the present time in physiology, pathology,

pharmacology, and in clinical medicine, and to the large sums expended in almost every school on increased laboratory accommodation, to say nothing of the new laboratories constructed on the Embankment at great expense by the Conjoint Board of the Royal Colleges of Physicians and Surgeons, and which will shortly be opened for original research. With this resumption of activity in the domain of medical science, the teaching of elementary chemistry assumes an importance not hitherto accorded it. For a sound and efficient training in the principles of both physics and chemistry will be an essential equipment of the student of the future if he is to understand the facts that chemical research has to put before him throughout his professional career. These remarks have seemed necessary, since there is, we believe, a disposition to relegate the teaching of elementary chemistry to a more inferior position than it even now holds in the medical curriculum. Such a step would be disastrous, and would be utterly retrograde. For if, during the many years that chemistry was but little regarded as an auxiliary to medicine, it formed one of the essential features of our examinations, now that a more extended knowledge of the subject is required for the new departure chemistry has taken as applied to medicine, it would be absurd to reduce the elementary teaching to what a sixth-form boy could pick up during his last half-year at school.—*London Lancet*.

PREVENTION OF CONSUMPTION.—The health department of the city of Providence has issued the following circular:

"Consumption causes more deaths than any other disease the human race is subject to. Nevertheless it is to a very large extent preventable. It is, though not generally known, a contagious disease. Consumption, or pulmonary tuberculosis, is in every case caused by disease germs which grow in the lungs in enormous numbers. When a person is sick with this disease these germs are coughed up in great quantities in the expectoration, and when this becomes dry and

crumbles, or is trodden to dust, the germs float about in the air and are liable to be breathed into the lungs of any one. If the lungs of the person who does breathe them are poorly developed, or if the constitution is feeble, the germs are very sure to grow and cause the disease. Unfortunately, we do not know how to kill them when they are once in the air-passages. The best that can be done is to build up the system and strengthen the lungs by the use of cod-liver oil, good food, and fresh air.

"Much, moreover, can be done to prevent the spread of the disease by destroying the germs as completely as possible in every case.

1. "No person with consumption should ever spit on the floor or in the street. If handkerchiefs or bits of cloth are employed they should at once be disinfected or burned. A good plan is to use a small wide-mouthed bottle with a rubber stopper. The contents should be thrown into the fire, and the bottle and stopper thoroughly scalded with boiling hot water every day.

2. "The dishes used by a consumptive should be at once scalded, and the unwashed underwear and bed-clothing should be thoroughly boiled as soon as possible.

3. "When a person with consumption has diarrhea, the discharges from the bowels should at once be disinfected, as at this time they contain the disease germs. A good way is to add a half teaspoonful of fresh chloride of lime, or fill up the chamber vessel with boiling water.

4. "No one with consumption should sleep in the same room with another person, and the room occupied by a consumptive should be thoroughly cleansed as often as possible.

5. "No mother with consumption should nurse an infant, and children ought never to be taken care of by a consumptive person."—*Boston Medical and Surgical Journal*.

PROFESSOR MORITZ ROSENTHAL, the well-known electro-therapist, of Vienna, died on December 30th in the fifty-fifth year of his age.

DEATH OF SIR WILLIAM GULL, BART.—With much regret we have to announce that Sir William Gull died on Wednesday, January 29, 1890, at 12:30, after two days' acute illness. He never recovered from the effects of the cerebral hemorrhage which occurred in October, 1887, although until two days ago he was not confined to his room, and was able to see his friends, and to take an interest in the numerous matters with which he was conversant. On Monday, while at breakfast, he became aphasic, and soon relapsed into unconsciousness. He never rallied, the coma gradually became more profound, and he passed away quite peacefully on Wednesday morning. Sir William Gull was seventy-three years of age on December 31st.—*London Lancet*.

REGULATION OF THE PRACTICE OF MEDICINE IN THE DISTRICT OF COLUMBIA.—Senator Ingalls has introduced a bill into the Senate establishing a Board of Medical Examiners for the District of Columbia. The bill provides that the board shall consist of ten physicians or surgeons, three dental surgeons, and, in addition, five homeopathic practitioners of medicine. The term of office shall be four years.

The members are to be appointed by the District Commissioners, and the board is to prescribe rules and regulations for the examination of all candidates for the practice of medicine appearing before it. The board is to examine all persons of either sex appearing before it, and when an applicant shall have passed a satisfactory examination the president of the board shall grant to such a person a certificate to that effect. Examinations are to be practical, and no candidate is to be kept waiting for an examination for a longer period than thirty days. Re-examinations can be held at the expiration of three months.

Any person obtaining a certificate from the board shall register the same at the health office, and shall then be allowed to practice the branch in which he has passed the examination, and no person shall commence the practice of medicine, surgery, or

dentistry in the District who has not first obtained such a certificate.

No person not a registered practitioner of medicine shall offer for sale any drug, nostrum, etc., without first obtaining a certificate from the board setting forth that the said article may be offered for sale.

Violations of the act are to be punished by a fine of not less than \$20 nor more than \$100, or by imprisonment for not less than thirty days nor more than three hundred and sixty-five days, or by both.

Nothing in the act is meant to affect the business of registered pharmacists or of physicians called in for consultation from other cities.—*Boston Medical and Surgical Journal*.

WOMEN DOCTORS IN GERMANY.—An association of German ladies, at a meeting a short time ago, passed a resolution agreeing to a petition being presented to the divers German governments, praying for permission to be granted to women to study medicine. The petition so far has been flatly refused by Prussia, Wurtemberg, Saxony, the Duchies of Hesse-Darmstadt, and Saxe-Weimar. This is not surprising in view of the hyper-congested condition of the medical profession in the fatherland. The States may be expected to know what is best for themselves.—*Med. Press and Circular*.

SPIRITUALISM AND INSANITY.—Testators would do well to control or disguise spiritualistic tendencies, for their exhibition in any marked degree opens the door to litigation by disappointed heirs after their death. Such an action is now pending in France, and there will doubtless be a conflict of expert testimony as to the significance of a belief in the manifestations of spiritualism in relation to the sanity of the individual testator. The question, of course, must turn on the details in this particular case, for unless a belief in the supernatural is to be accepted *per se* as evidence of insanity—a doctrine somewhat in advance of the times—a leaning in the direction of spiritualism has nothing in it to stamp any one as insane. It

is extravagance in belief and not belief itself, which reveals the flaw, and this holds good whether the extravagant belief be orthodox or heterodox. Ultra-spiritualistic tendencies only constitute a variety of religious mania, and require the same proof to disqualify their possessor for testamentary disposition. Most of us are familiar enough with persons who exhibit a strange susceptibility in this direction without entailing the slightest disability in other departments of daily life. *Medical Press and Circular*.

DR. HERMANN BREHMER, the founder of the famous Sanitarium for Diseases of the Lungs at Goerbersdorf, in Silesia, died there on the 23d instant. His sanitarium was the first of its kind, the model after which all others were established. His literary work was on the "Cure of Chronic Consumption," in which he maintained the then bold paradox that consumption was curable. Some of the greatest living authorities on consumption have been his assistants, namely, Dr. George Cornet, whose investigations concerning the propagation of tubercle bacilli are well known, Dr. Petri, of the Imperial Health Office, Dr. Dettweiler, of Falkenstein, and Dr. Roempler, of Goerbersdorf.

DR. THOMAS' BOOK IN CHINESE.—Another medical work by an American professor has been reproduced in the Chinese language, namely, Dr. Thomas, of New York, on Diseases of Women. There are five volumes in the Chinese translation. The general appearance of the work is satisfactory, but the illustrations are rather rudely done. This work will undoubtedly be a great help to those who are engaged in infusing the new education in the high official circles of that empire. It may even be one of the means of hastening the downfall of the antiquated methods that have so long resisted the medical reforms coming from abroad.—*Journal of the American Medical Association*.

SMALLPOX prevails in Mexico, and quarantine has been declared along the Texas line.

A REMARKABLE accident occurred at Newburgh, January 20th, by which a horse and man were severely injured and another man was killed by electricity. In this case neither the horse nor either of the men was even in contact with the wire that carried the fatal current. The current was diverted from the wire, the insulation of which had become impaired, by an iron awning post, which the horse, who was tied to it, touched with his nose. In going to his rescue the man who was killed also touched the post, but the man who was injured simply touched the body of the other.—*Medical and Surgical Reporter*.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced: Dr. Ulrich, assistant to Prof. Eiselt, of Prague; Dr. Wehendel, Director of the Veterinary School, and formerly President of the Royal Academy of Medicine, Brussels; Dr. F. Arnold, Emeritus Professor of Anatomy in Heidelberg, at the age of eighty-eight; Dr. Cauvet, Professor of Botany and Materia Medica in Lyons; Dr. H. Frey, formerly Professor of Histology in Zurich.

DEATH FROM CAYENNE PEPPER.—A lad living at Bacnp, England, complained of a cold and his mother gave him a dose of a mixture which contained a quantity of cayenne pepper. A few minutes afterward he was found on his knees gasping for breath, and after struggling for several minutes he expired. The physician who was called decided that death was caused by the action of the pepper on a weak heart.—*Druggist's Circular*.

THE report of the Committee on Nostrums from the American Association for the Study and Cure of Inebriates, through its chairman, Dr. N. R. Bradner, of Philadelphia, shows that of fifty different proprietary preparations sold for special usefulness in the reformation of intemperate habits all and each contained alcohol in varying proportion from 6 to 44 per cent.

A LARGE FIELD FOR FEMALE PRACTITIONERS.—Two American lady physicians have made a marked impression in China. One of them, by her aptitude for surgery, has astonished them. She resides at Shanghai, but the name is not given in the telegram, which has come to us by way of London. Another lady, Dr. King, has won her way into high official circles, and it is said she has even been consulted privately by the dowager empress, who has had pulmonary tuberculosis.—*Journal of the American Medical Association*.

CHOLERA IN MESOPOTAMIA.—There seems to be little doubt of the advance of cholera in Asia Minor, and therefore of the increasing probability of its invading Europe. Intelligence has just been received from Basorah stating that three thousand fatal cases had occurred there, including the English Vice-Consul, Mr. Robertson, and two of his children.—*Lancet*.

THE announcement is made that a London lady has taken up the labors of Father Damien and will go to Molokai to work among the lepers. She is Amy Fowler, daughter of Chaplain Fowler, of the Bath Workhouse, London. Miss Fowler studied medicine under Pasteur in Paris. She is twenty-seven years old, and goes to the lepers under the name of Sister Rose Gertrude.

THERE were 717 deaths in Vienna during the week ending January 4, 1890, 253 more than the corresponding week of the previous year. According to the *Wiener Med. Presse*, the great increase of deaths was largely due to the prevalency of the influenza, a very large proportion being from inflammations of the respiratory organs.

RECENT statistics show that Austria contains only one hundred and eighteen homeopaths, and only forty-four of these profess to practice homeopathy exclusively.

DR. V. BERGMANN has been appointed to fill the late Dr. v. Volkmann's place on the editorial staff of the *Centralblatt für Chirurgie*.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., MARCH 15, 1890.

No. 6.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

BILATERAL ORBITAL GUMMATA.

BY T. C. EVANS, M. D.

*Demonstrator of Anatomy in the Hospital College of Medicine,
Visiting Surgeon to the Eye and Ear Department of the
Louisville City Hospital, Louisville, Ky.*

Susan B., colored, aged twenty-nine, came to my office October 17, 1889, suffering from binocular exophthalmia, the left eye being the most prominent; the globe, together with its mass of hypertrophied conjunctiva, protruding far beyond the free margin of the lids, impinging on the nose and hanging well down upon the cheek. The cornea had become dry and shrunken from exposure, and looked like a horny crust adhering to the superior and outer portion of the protruding mass. The tumor was freely movable, there being no adhesions either between the conjunctiva and globe or between the lids and the mass. The globe could be easily defined; the tension was apparently normal. The right eye was pushed forward and slightly outward; the inferior *cul-de-sac* was obliterated by a roll of hypertrophied conjunctiva; the lower lid was everted and pushed downward by this mass of tissue, which was covered by a hard, thick crust formed by desiccated mucus and conjunctival secretions. The pupil was dilated *ad maximi*. The cornea was quite hazy from exposure. It was impossible to get a distinct image of the fundus. Enough, however, could be made out to ascertain that the retinal vessels were engorged, but not tortuous, showing that whatever produced the exophthalmus did not exert much pressure on the optic nerve. The upper lid

was edematous, with a tendency to ptosis. The protrusion was too great on the lids to completely shield the cornea, which was already hazy, as before stated. Vision was still fairly good; by holding the lids open with her hand she could count fingers at fifteen feet. The line of the protrusion was a little external to the normal axis in each eye, but the deviation was not marked, as is usually the case in orbital tumors. Examination of the nasal cavities, vault of the pharynx, antri, and frontal sinuses yielded negative results. The ocular movements were necessarily much restricted from the degree of the protrusion, but no paralysis could be detected. Aside from being a bilateral affection, there was nothing characteristic about the exophthalmus, and no evidence of



malignant or specific complications. The hypertrophied conjunctiva and connective tissue, the edema of the lids, together with the other symptoms, were all the natural belongings of ptosis from any cause. The accompanying cut (1), made from a photograph, shows tolerably well her condition, except in the right eye the size and shape of the conjunctival mass is not

distinctly shown. The protrusion of the right eye was also much greater than would appear from the cut. The patient stated that she had first noticed the trouble about six months previous to the time she came to me, but had never had it examined or treated at all, and that both eyes were affected simultaneously. She was ignorant and indifferent, so that an intelligent history could not be obtained. There was a slight enlargement of the thyroid gland, the enlargement being more perceptible to touch than to sight. There was no disturbance of the heart's action, either in rhythm or frequency. Her general health was apparently good; her appetite was good, and she was well nourished. She admitted having had syphilis ten years ago. She had one child nine years old which had congenital syphilis. She had had a number of abortions. There were also traces of syphilitic lesions in the pharynx. Taking into consideration the fact that the affection was bilateral, the extent and direction of the protrusion, the absence of pain, the normal position of the retinal vessels, together with the slight enlargement of the thyroid gland, I made a diagnosis of exophthalmic goitre. Notwithstanding the fact that there was entire absence of all cardiac symptoms, which Flint says is the only constant symptom in the disease. Either the hypertrophy of the gland or the exophthalmus may be wanting, but the heart symptoms never. Neither was there any retraction of the upper lids, nor was there any nervous excitement or dyspnea. As the case seemed quite a unique one, I showed it to two other ophthalmologists, both of whom concurred in my diagnosis. I sent the patient to the City Hospital, where, on October 20th, I enucleated the left eye. After enucleating the eye I took a strong pair of scissors and excised the pendulous mass of conjunctival tissue which hung from the inferior *cul-de-sac* down upon the cheek. I then seized the mass in the right eye with my fixation forceps, and, dissecting it up from the sclera, removed it entirely. After the mass was removed I tried to close the wound in the conjunctiva with sutures, but the membrane was so badly disorganized from exposure that the stitches would not hold; so I left it to heal by granulation. Both eyes were dressed with

compresses and roller bandage. Chloroform was the anesthetic used, which she took without a single unfavorable symptom. This was another point against the diagnosis of exophthalmic goitre, as it is well known that patients suffering from this disease take all anesthetics badly. While I am a firm believer in the superiority of chloroform over all other anesthetics, I confess to have given it in this case with much fear, if not with trembling. The patient was not given any treatment except a hypodermic of morphine. On removing the dressing, forty-eight hours after the operation, I found the discharge from the left orbit very profuse and offensive. After cleansing out the cavity I pressed my finger into the orbit. Instead of the uniform hypertrophy of the adipose cellular tissue of the orbit, together with the engorged and dilated blood-vessels, I found a distinct and well-defined tumor about the size and shape of a small almond, and occupying the space between the entrance of the optic nerve and the inner canthus. It was of a yellowish white color; the outer portion was hard and fibrous, and contained a few blood-vessels. It was movable, and had no connection either with the periosteum or the lids, but seemed to lie embedded in the connective tissue of the orbit. No attempt was made to remove the growth, except a small section for microscopic examination. The protrusion of the right eye had not been lessened by the pressure, though the haziness of the cornea had disappeared while the eye was closed. From the gross appearance of the tumor in the left orbit I was convinced that, instead of an atypical case of exophthalmic goitre, I had to deal with a case of syphilitic gummata of the orbit. She was ordered iodide of potassium, beginning with twenty grains three times a day. In forty-eight hours there was quite a perceptible improvement. The exophthalmus of the right eye was lessened, the tumor of the left orbit was smaller, while the edematous condition of the lids had disappeared rapidly. The dose of the iodide was steadily increased, until on the tenth day she was taking ninety grains three times a day. The improvement was now so rapid that I did not think it necessary to further increase the dose. The maximum dose

of ninety grains, however, was kept up as long as she stayed in the hospital, without any gastric disturbance or any symptoms of iodism. The pupil remained dilated after the exophthalmus had disappeared. It contracted readily on the instillation of eserine, and did not again dilate when the drops were discontinued. The long-continued exophthalmus and edema produced an atonic condition of the right upper lid, which resulted in entropion after the parts assumed their normal proportions. To relieve this I removed an elliptical fold of the integument and united the wound with sutures.



Cut No. 2 represents the condition of the patient when she was discharged from the hospital, just one month after the operation. I submitted the specimen to Dr. Dugan for microscopical examination. He reports as follows:

"Dear Dr. Evans: The tissue you sent me to examine I found macroscopically to be of a yellowish-white color and very soft. Microscopically the outer part of the tissue presented a distinctly fibrillated matrix filled with round cells, while the central or inner part was made up largely of granular matter, with some fat granules, shrunken cells, and poorly outlined bands of fibrous tissue.

W. C. DUGAN, M. D."

In making a hasty review of the literature of the subject, I have been unable to find a reported case of bilateral gummata of the orbit. Dr. W. W. Seeley reported a case of gummy

tumor of the left orbit to the American Ophthalmological Society in 1885, with microscopic specimens of the growth. The diagnosis, however, was not made until the eye was enucleated. Dr. Tangeman, of Cincinnati, reported a case in 1887 (Lancet Clinic) of gummy tumor of the right orbit. In his case diagnosis was made early, and by vigorous course of treatment the eye was entirely restored. Very few of the text books, either on diseases of the eye or on syphilis, even mention the subject. Those that do mention it dismiss the subject in a few words. Dr. Noyes merely says: "As to gummy tumors growing in the orbits, nothing special need be said; that their bulk must displace the eye-ball and that they may otherwise interfere with its functions is self-evident." Nettleship says: "Nodes in the orbit (whether cellular or periosteal) occur but rarely." Loring says: "I never met with a case of exophthalmus dependent on this cause during my many years' connection with the New York Eye and Ear Infirmary." Alexander, in his report of 4,383 cases of syphilis of the eye and its appendages ("Syphilis und Auge," Wei-baden, 1889), does not report a case of orbital gummata. I have kept the case under observation since her dismissal from the hospital. Up to this time (January 15, 1890) there has been no return of the growths. The movements of the left eye are normal; the pupil responds readily to light; the haziness has entirely disappeared from the cornea, and vision is normal.

LOUISVILLE, KY.

ABDOMINAL SECTIONS IN THE PRACTICE OF DR. CHAS. B. PENROSE, JR., PHILADELPHIA.

BY J. G. CARPENTER, M. D.

CASE 1. Negress, aged twenty five years; has been an invalid one year or more, and has had continuous pelvic pains, at times much aggravated, located in diseased masses on each side of the uterus. On digital and conjoined manipulation large sausage shaped masses are detected in the broad ligaments. Diagnosis, hydro-salpinx with adhesions. Locomotion is very painful. Abdominal section verified the

diagnosis. Both tubes and ovaries were removed, but were bound down by very strong adhesions; right ovary enlarged and cystic; left atrophied; tubes closed and fimbriae destroyed. Irrigation with hot distilled water; drainage tube inserted; peritoneal toilet aseptic; recovery complete. Disease of the tubes was of gonorrheal origin. Length of incision was one inch and a half; three peritoneal and two superficial sutures.

CASE 2. Mrs. W, white, aged about twenty-eight years; pale; gives the history of constant pain over both ovaries; dysmenorrhea. Pain is increased by constipation, going up and down stairs, riding on the street cars, and by pressure, and has continued seven years. On digital and conjoined manipulation masses of considerable size were felt on both sides of the womb, much larger on the right than on the left side. Abdominal section was advised and accepted by patient. Pathological specimens removed; the tubes were thickened and shortened, closed; ovaries scirrhotic; there was also a cyst of right broad ligament, which was ruptured by breaking through the numerous adhesions. Glass drainage tube inserted; removed in twenty hours and a rubber substituted; peritoneal toilet aseptic; origin of disease gonorrheal. Irrigation with hot distilled water; length of incision one inch and a half; recovery complete.

CASE 3. Negress, aged between twenty-five and thirty years; has had disease of the uterine appendages more than three years, also the sequelæ. The disease dates from a former gonorrhea. Large mass on right side of uterus, and a smaller one detected on left side; on section the tubes thickened, closed, and hypertrophied; ovaries atrophied; cyst of right broad ligament; appendages imprisoned in firm adhesions were removed; peritoneal cavity irrigated with hot distilled water; drainage-tube left in twelve hours; peritoneal toilet made aseptic; length of incision one inch and a half. In all of these cases suction of the drainage-tubes was practiced every two or four hours by hard, black rubber syringe with a long nozzle; recovery complete.

Mrs. X, white, aged thirty years; has had cystitis three years; was an inmate in the gen-

eral hospitals more than a year, then an outdoor patient for months, though a cure was not accomplished. Under rest (irrigation of the bladder with hot and saturated solutions of boracic acid an hour at a time three or four times a day) Dr. Penrose made a vesico-vaginal fistula to aid rest and drainage. In the bladder was found an ulcer an inch or more in diameter; this and the bladder were coated with phosphatic deposits. Since the operation the bladder and vagina have been given complete rest and irrigated as already described. The cystitis was cured in three months and patient got to be a strong, healthy woman. The vesico-vaginal fistula was closed by Drs. Penrose and Price. The edges were uniformly pared down to the mucous coat of the bladder at least half an inch in width. The opening was closed by twelve silk-worm gut sutures held securely by compressed shot. This material seems by far superior to silk or silver, and doubtless will be the favorite material for fistulæ in the future. The writer never witnessed an operation done with more ease, skill, and rapidity than this by these experts. Recovery was complete in ten days.

The study and observation of these cases, with many other similar ones, will convince the practical mind how important and essential abdominal section is, and also prove the folly of attempting a cure by electricity of pus tubes, pelvic abscesses, and deformed appendages, encapsulated in strong and old adhesions; while to one who has seen the abdominal specialist and general surgeon operate, it is self-evident that the general surgeon should not do or should have special training in abdominal surgery before assuming its responsibilities.

Specialists seldom make an incision over an inch and a half; it is the exception for them to see the abdominal contents; the *tactus eruditus* is developed to an almost marvelous extent. Hot distilled water is the only antiseptic used to irrigate the abdominal and pelvic cavities. Asepsis is pursued in all the details of the operation, both as concerns patient, nurse, operators, instruments, and assistants, and the room and contents. The specialist intrusts the details (before and after) during operation to no one, superintends every thing, sees his patient

every few hours after the abdominal section to ascertain the condition of patient and prevent complications, and if the nurse is giving the necessary attention; does not give opiates, but gives the patient every chance to get well; makes short incisions, enters the abdominal cavity in one or two minutes, completes the operation in from six to thirty-five minutes (it is seldom an abdominal section lasts an hour); rarely uses more than two or three sponges, two hemastats, one bistoury, one pair of scissors, closes the wound with three peritoneal and two superficial sutures, irrigates with hot distilled water, and does not use, as a rule, sponges to cleanse the abdominal cavity. When necessary, he makes the most thorough drainage and practices the most complete asepsis from the purgation and hot water and soap bath before operation until recovery of patient. Shock from prolonged operation, etherization, and exposure of abdominal viscera is avoided. Nothing is left undone.

The general surgeon makes the abdominal incision large enough not only for his hand but his foot, the specialist uses one or two fingers in the abdominal cavity, the general surgeon the whole hand for diagnosis and intra-peritoneal operation. He also opens the lips of the wound to the utmost, looks into the abdominal cavity with both eyes, plays "peek-a-boo," encounters a Cerberus or pathological condition that frightens him, and makes a hasty retreat and leaves patient to his fate and early death. The specialist would overcome the complication, if it were possible, and prolong the patient's life months or years, and would not open and re-open the abdomen several times to learn the patient's condition.

The general surgeon enters the abdomen in from ten to thirty minutes, prolongs the operation and etherization one or two hours, allows the intestines to extrude, all of which increase the shock; besides, chemical antiseptics are used in the peritoneal cavity which are irritants; antiseptics is relied on for success, asepsis being scarcely considered, whereas if thorough asepsis was used antiseptics would not be necessary. After the general surgeon has dwelt specifically upon the importance of placing thoroughly in apposition similar tissues and uniting the peritoneal surfaces, the sutures having been introduced

three fourths of an inch apart, in his eagerness to get done he breaks one or more of the sutures in tying, lets the wound gape, takes a superficial suture or puts on a strip of adhesive plaster, but never replaces the broken peritoneal suture; besides, he has to use half to a dozen or more peritoneal sutures to close the wound in the abdominal wall.

STANFORD, K Y.

LA GRIPPE, OR EPIDEMIC INFLUENZA.*

BY T. B. GREENLEY, M. D.

The character of the present epidemic seems to vary somewhat in its peculiarities from those prevailing heretofore. In the first place, it has spread more rapidly than any epidemic we have a history of. It is not positively determined where it had its origin. From the best account we can obtain, it commenced at Kalomna, about twenty leagues southeast of Moscow, Russia, while others claim that it had its origin at Wassali, Ostrow, some distance southwest of St. Petersburg. Nevertheless, by the middle of October nearly one third of the population of the capital was smitten with the disease. This was within a few days after its appearance at the above-named places, and so rapid was its extension that by the middle of December it seems to have been epidemic in the principal cities and towns of continental Europe.

It made its appearance in Boston about the middle of December,* and in a few days we had accounts of its presence in New York, Chicago, Omaha, and other places, seeming to take its course at first in a westerly direction. It is now prevalent over the United States as well as most of the western hemisphere.

As before remarked, no epidemic that we have a record of ever made such rapid progress in its extension. It might be regarded as pandemic.

In less than three months from the time it made its appearance in Russia it spread over the continents of Europe and North America.

We have accounts of influenza prevailing as far back as the twelfth century. The last one

*Read at a meeting of the Hardin County Medical Society, March, 1890.

in this country was in 1873. In that year it seemed to affect horses more severely than the people. In some cities horses were disabled to such an extent that it became necessary to substitute cattle to do the hauling. The epidemic, however, was mild as far as it pertained to the people. We also had an epidemic of the so-called *grippe*, or influenza, in 1843. The writer resided in Louisville at that time, and well recollects it, having had personal experience of its effects. The prominent symptoms were those of common coryza, with severe bronchial irritation.

The etiology of the disease seems to be somewhat shrouded in mystery.

Some claim that it is due to a micro-organism, while others charge it to the unusual warm fall and winter just passed. When we study the rapid manner with which it has extended in every direction, making as rapid headway across the ocean as it does over land, and affecting large numbers of a population simultaneously without time of incubation, we must concede it can not be due to microbic origin. And as it frequently prevails in cold as well as warm weather, it can not be regarded as dependent on temperature. It is doubtless due to meteoric or atmospheric influences, but what changes or special conditions are necessary for its production perhaps will never be solved.

Dr. Rauch, of the Illinois State Board of Health, is of the opinion that it may be caused by the high temperature and heavy rainfalls during the past fall and winter.

These conditions may have had a tendency to cause its more rapid extension over this country; but as it is not essentially a winter disease, and as we frequently have as much or more rainfall during the spring and summer months without developing the disease, the past winter weather could not have been a prominent factor in its causation.

It can hardly be regarded as being entirely due to conditions of the atmosphere, unless those conditions could be the same all over the countries where it may become prevalent. It seems to prevail independent of any special conditions, either hygrometric, thermometric, or barometric. Neither can it be of mias-

matic or telluric origin, as it has attacked ship's passengers in mid-ocean, where telluric influence would be out of the question. As before remarked, it has by some been regarded as being due to a species of bacteria that has the power to multiply rapidly in the atmosphere.

It was recently announced that this specific organism had been discovered in Vienna by Dr. Jolles, but the British Medical Journal has received a dispatch from the doctor stating its falsity and giving a true statement of his experiments, upon which the editor of the Journal remarks: "We have now before us the original preliminary communication by Dr. Maximilian Jolles, the reputed discoverer of the microbe of influenza, and well might we exclaim, '*Parturiunt montes, nascitur ridiculus mus!*'" After all, the dust raised about the discovery of the microbe of influenza vanishes into air on perusing the statements made by the discoverer himself." Several objections might be urged against this theory. In the first place, the same character of microbe would not be likely to multiply with equal rapidity in all countries and in all grades of temperature at the same time, as it seems the disease has no choice as to prevalence between extreme degrees of low or high temperature. In the second place, as before remarked, all known bacterial diseases have a certain time allotted them for incubation or latency; but in this disease large populations are attacked at once, allowing no time for communication from person to person. And in the third place, it would be a matter impossible for microbes to make headway, in their passage over the ocean, against contrary winds, sometimes blowing more than fifty miles an hour.

Influenza, unlike some other epidemics, ignores all hygienic laws and observes no respect to sanitation whatever. It may be said it has no regard for persons or localities, and attacks high and low, rich and poor alike; in a word, it seems to be a democratic disease.

Then the question may be asked, what is its etiology? This problem perhaps will, at least for the present, have to be relegated to those things which in our philosophy we are unable to account for.

There has been, in many cases, one element prominently manifested, which no doubt was due in a great measure to the character of weather Dr. Roach describes. I allude to the malarial symptoms which seem to predominate in a majority of cases. As an insight to the character of the weather, I give a synopsis of the temperature, barometric pressure, and rainfall during the winter months.

For December: Highest temperature, 71° ; lowest, 24° ; average, 51.4° ; excess during the month, 419° ; greatest daily range, 27° . Precipitation, 1.74 inches; deficiency, 2.57 inches. Mean barometer, 30.70.

January: Mean temperature, 44.8° ; highest, 72° ; lowest, 14° ; greatest daily range, 35° . Rainfall, 5.73; excess, 1.48. Mean barometer, 30.70.

February: Mean temperature, 46.5° ; highest, 73° ; lowest, 22° ; excess, 220° ; greatest daily range, 36° . Rainfall, 6.25 inches; excess, 1.77 inches. Barometric pressure, 30.10.

The excess of temperature for the three months was 963° , equal to 11° daily. The excess of rainfall for the three months was 0.68 inches. (See Signal Service reports, Louisville.)

These calculations are based on the mean temperature, rainfall, and barometric pressure of the same month for the past seventeen years.

The temperature shows a daily average of 11° above, making the past winter the warmest in this latitude of any within the recollection of the oldest inhabitant. In fact, it has not been sufficiently cold to destroy any malarial influence that may have existed last summer and fall. On this hypothesis we can readily account for the cases of intermittent and remittent fevers that have occurred in the mean time. If my recollection serves me correctly, the epidemics of 1843 and 1873 were milder in character than that of the present. They were not so generally in their effects accompanied by such severe neuralgic symptoms nor fever of such pronounced remittent type. The former occurred in June and the latter in October—seasons of the year when we should have had as much or more of the malarial element manifested.

To be sure, a great many during the present epidemic have had very mild attacks, hardly severe enough to cause them to take bed or call for medical assistance. As a rule, when the disease occurs only as a coryza, affecting the throat and upper air-passages, it is usually treated with domestic remedies. It observes quite a broad latitude, as far as severity of symptoms is concerned. It may be as mild as an ordinary cold, with slight aching pains through various parts of the system, or as severe as an attack of remittent fever accompanied with the most intense neuralgic pains. These pains sometimes affect the head, sometimes the lumbar region, and sometimes the other parts of the body. We frequently have severe aching in the lower extremities, and occasionally very severe intercostal neuralgia. This character of pain, in many instances, has been so intensely severe as to cause some writers to regard it in the light of dengue fever. These pains, like the fever accompanying them, are generally remittent in character.

It would seem that this epidemic has exerted an unfavorable influence, as regards lung trouble, in both bronchitis and pneumonia, both diseases being more prevalent, especially in cities, and more fatal in character.

The mortality in these diseases in Louisville has been greater than usual in the last few weeks, while, strange to say, that from consumption has been materially less. It would also seem that it has a deleterious impression on old people and those of delicate health. A great many old people have died, especially in cities, since the influenza became prevalent. Whether it has influenced the increased mortality of other diseases outside of those mentioned, we have no record; but we notice the daily mortality lists in some cities, more particularly Boston, New York, and Chicago in this country, and Paris and St. Petersburg abroad, have been greatly lengthened. In Chicago for a short time the usual daily mortality was more than doubled.

Another peculiarity of this epidemic is, that the least exposure after a supposed recovery is apt to produce an attack of bronchitis or pneumonia. Two cases of very severe attacks of bronchitis have come under my observation

from this cause. I am of the opinion, from observation and from what I can learn from others, that the type of the diseases alluded to is unfavorably affected by the cause of *la grippe*. Persons affected with this disease seem to suffer from nervous and muscular prostration out of proportion to the severity of the attack. This also may be regarded as a peculiarity attached to the epidemic.

As to the management of the disease, I can not say that I have had a large experience, not more than thirty cases having come under my observation. In the country I do not regard it a dangerous disease when we can have the patients properly cared for. There is such a great variation in the manifestation of symptoms in different cases that no special treatment can be laid down that would be suitable in its treatment. In the mild cases, which perhaps constitute the majority, it should be treated as a simple coryza; say at night a full dose of quinine and Dover's powder (quinia, pulvis Doveri, $\bar{a}\bar{a}$ grs. v), keeping the patient in bed next day; and as a rule he is relieved. A case assuming the remittent type of fever, with more or less neuralgic pain, would require the same prescription repeated at intervals of four hours, and if the temperature exceeds 102° add grs. iij to grs. v of acetanilide. This plan I have found to break up the trouble in twenty-four to forty-eight hours. Should the supraorbital pain be severe, a small folded cloth wet with aqua ammonia should be applied to the part and well pressed against it for one minute; this may be repeated when necessary.

Should the patient from imprudence take pneumonia or bronchitis as a sequela, of course treatment must be used adapted to the case in hand, but at the same time it must be recollected that great debility, especially of the nervous system, follows influenza, which should modify the ordinary treatment for those diseases.

The treatment as advised by various writers differs in some particulars, some recommending the free use of alcoholic liquors with quinine and antipyrin, while others object to the use of alcoholics. I have seen no case wherein I thought alcohol would do good; of course, were I called to an inebriate with this disease

I would not withhold his dram; and as to antipyrin, I would be somewhat apprehensive as to its use, owing to its usual depressing effects; nor would I advise as large doses of quinine as some recommend. My special objection in this regard also applies to large doses of antipyrin on account of the general debility resulting from the disease.

Influenza, in the estimation of some observers, is in some way allied to epidemic cholera. This opinion doubtless grew out of the fact that it has occasionally preceded that malady in its prevalence over Europe. This has more particularly been the case in Russia. So much are the profession of that country impressed with the probability of its following in the footsteps of the present epidemic that the authorities are about instituting measures in the way of quarantines, etc., to prevent its visitation.

The facts in the case of cholera following influenza are no doubt altogether incidental, and the two diseases bear no relation to each other as cause and effect.

WEST POINT, KY.

Correspondence.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

One is always interested in the phenomena of somnambulism and hypnotism, but never so much as at the present time, science having at last dispossessed charlatans of the study of these phenomena, which had been too long relegated to them. Professor Chareot has contributed in a great measure to place the subject in its proper light. In a very interesting lecture on this and allied subjects, lately delivered by him at the Salpêtrière Asylum, he began by stating that he must acknowledge that he was wrong in disdaining for so long a time, and of abandoning to empirics a whole domain of facts which he repulsed, as he was unable to explain them in a satisfactory manner; that he was even obstinate to deny them, for the simple reason that he did not understand them. He next endeavored to determine the psychological character of the state of somnambulism, this character being the abso-

lute credulity of the subject hypnotized. However unlikely be the assertion expressed by the hypnotizer, the subject accepts it; it becomes the center of his cerebral activity; all his thoughts proceed from it until another element be furnished to his credulity, even if the new assertion were absolutely contrary to the first. Among many examples, M. Charcot cited the following: He presented to a woman in a state of hypnotism a leaf of white paper, in doing which he said: "Here is my portrait; do you find it a good likeness?" After a moment's hesitation she replied: "Oh, yes; it is your photograph. Will you give it to me?" In order better to impress on the mind of the subject the idea of this imaginary portrait, he indicated to her with the finger one of the edges of the paper; telling her that his profile was turned in that direction, he described his dress, indicating certain supposed accessories. Then, taking back the paper, he placed it among other leaves of white paper all of the same size, but not without making on it a slight mark, almost imperceptible, in order that it might be recognized. Finally, he handed the whole to the subject, asking her to examine the packet and to see if she would not find in it something that she would recognize. She immediately turned the leaves about, and as soon as she arrived at the supposed portrait she cried out: "Here is your photograph." The learned professor observed that that experiment was certainly a curious one, but the following is still more so: In taking back the paper and returning it to her, she declared that the portrait was on the other side. M. Charcot then renewed the experiment, giving her the whole packet of paper. As previously, she turned the leaves about and stopped at the imaginary portrait, declaring that that was his photograph. He sent her away from the consulting-room, and on going to her ward she showed the pretended portrait to her companions, who laughed at her delusion; but even this did not convince her of her error. If he gave her the order, before waking, to remain several consecutive days under the influence of this hallucination, the phenomenon lasts the number of days indicated. M. Charcot remarked that this experiment had been

repeated hundreds of times by himself and others, which any one can verify, adding that the objectivity of these facts is as complete as can be desired in the researches of this nature. He then undertook to give a precise notion of what suggestion is by the following experiment: He showed the subject a white piece of paper, declaring that it was his portrait, the falsity of which, of course, she would have perceived if she had been in her normal state. Nevertheless, by the effect of this singular credulity to which he had referred, the subject saw things just as he would wish. Almost without hesitation she attached herself to the idea presented to her, or, in other words, this idea took possession of her mind. She distinguished in the smallest details this imaginary portrait, and he had only to press her a little, when she would describe with profusion the smallest circumstances, and indefinitely unroll a veritable hallucinatory panorama, engrafting on the elementary notion of the portrait all the accessory ideas which presented themselves to her imagination. However, she scarcely deviated from the starting point; she continued to examine the paper, turning it about in all directions, regarding it near and at a distance, and studying it on all sides. When he ceased to speak to her she would persist to amuse herself for several hours with this white paper. In these cases things pass as if they existed in the brain, and under the influence of hypnotism there is an absolute emptiness of thought, and the subject is open to any suggestion. In this special case the development given to the idea of the portrait, its existence once admitted, was perfectly logical. But if he had suggested to the subject a thought altogether absurd, the suggestion would have been accepted with the same facility. For instance, if he had said that his portrait had two noses and three eyes, the allegation would not have raised the shadow of an objection. Such is the irresistible influence of suggestion in its most simple forms, and one can easily imagine to what varied results one can arrive at by this means. In continuing the analysis of the case, M. Charcot stated that when the subject, on his injunction, continues, after waking, to see a portrait on this white leaf, we have the proof of the

profound impression that the thought suggested may leave on the brain; for, even in the normal state and in ordinary life, this impression persists, as a parasite, during hours, days, and weeks without losing any thing of its power. The gravity of the phenomenon and the consequences which it might lead to in medical judi-prudence will not escape anybody. But, asks M. Charcot, is it quite necessary to appeal to the marvelous or to invoke the supernatural to explain the facts of this order? He does not think so. These phenomena, he said, have simply for cause a particular hyperesthesia of the senses, resulting from the hypnotic state. All that concerns this particular state is amenable to science, and ought to remain an integral part of its domain, and all our efforts should tend to maintain it there.

You will have heard of the atrocious murder that was committed lately in Paris on the person of a bailiff, and in which a young woman by the name of Gabrielle Bompard is accused of being an accomplice, and is now in prison awaiting her trial; but the supposed principal actor has not yet been discovered. The question is asked, as it generally is on these occasions, whether Gabrielle Bompard was under the influence of hypnosis when she drew the unsuspecting bailiff into her little apartment, which he never left alive, but was there murdered, his body doubled up, then put in a trunk and carried off to Lyons, where it was discovered. Lovers of the marvelous will have it that this young woman acted with the unconsciousness of a somnambulist. Such, however, is not the opinion of M. Charcot, who sees in Gabrielle Bompard a little person very perverse, and not at all an hypnotic subject awakened. He does not believe all that has been related about hypnotism and suggestion. That suggestion would push one to commit a crime, is only fable, and nothing of the kind has ever been seen at the Salpêtrière, where every form of hypnotism may be witnessed. He concluded with the assertion that suggestion can never push a subject to crime.

Hypnotism has been very much abused in certain quarters, and the French Minister of War has interdicted its employment by the medical officers of the army.

The general impression is that insanity is very much on the increase in this country. In a memoir in the *Annales d'Hygiène Publique*, Dr. Paul Garnier reported that insanity, in Paris at least, has increased to very alarming proportions. Thus, from 1872 to 1888, that is to say, in a period of sixteen years, this increase has been 30 per cent. Mental aberration is more common in men than in women, but the difference is very small. The principal factors of mental affections are intellectual overwork on one hand and alcoholism on the other.

PARIS, February, 1890.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

There has been quite a rush to bring out new hypnotics, and sulphonal has scarcely established itself ere it is succeeded by chloralamid. In its therapeutical action chloralamid has many resemblances to chloral-hydrate, but has not the special influence on the circulation produced by the latter body. It is being administered in doses varying for adults from fifteen to forty-five grains. One advantage it is found to have over chloral-hydrate is, that it does not taste at all unpleasant, and it is further superior to that article in not being caustic. As it is decomposed by alkalis, it may not be prescribed in alkaline solution, a quality that constitutes its chief drawback. It is said to induce a sound, healthy sleep, and in the short period that has elapsed since its first appearance it has made many friends.

Those who make interesting calculations as to the future population of the globe should be cautious in dealing with existing rates of increase. The register general returns for last year just published show that the multiplication of the people of England and Wales has fallen off. The excess of births over deaths was 367,224, the difference having steadily declined for the last five years. According to the results of the last two census years the increase in 1889 should have been 389,423, a number more than 22,000 greater than the actual fact. The birth-rate was unprecedentedly low, being no less than 2.5 per thousand below

the average of the previous decade; meanwhile the marriage-rate has not responded to the increased prosperity of the country, except in certain counties where the population is interested in mining; the death-rate is slightly higher than in 1888, having risen from 17.8 to 17.9. This is, however, very low compared with a few years back. Indeed, the Registrar-General points out that there are now something like 600,000 people alive in England and Wales whose death would have been registered if the rate of mortality had continued as it was between 1871 and 1881. No doubt a great part of this saving is due to improved sanitation. Perhaps one of the most remarkable items in the returns is the extraordinarily low mortality from smallpox, which only amounted to twenty-eight, the smallest recorded number of deaths in any previous year being 275 in 1886.

Atropine has been used for some time successfully in enuresis by Dr. William Bodkin, Dr. L. Coleman, Dr. D. P. Watson, and others. The last named reports thirty cases in children ranging from three to fifteen years of age, in nearly all of which a cure was produced by sulphate of atropine. The solution was composed of one grain of sulphate of atropine to an ounce of distilled water, and one drop of this solution was given for each year of the age of the child. It was given at four and seven o'clock in the evening.

Dr. Botkine, who has just died at Mentone, owed his great success to an incident which is not generally known. He was the favorite physician of the late Czarina, over whom he acquired the most extraordinary influence. The Empress, besides being afflicted with consumption, was suffering from disease of the heart. Like many other invalids, she was forever convinced that the physicians in attendance failed to understand her case—a state of things due rather to the extraordinary modesty of her Majesty than to any ignorance on the part of the doctor, for she was so devout that she could not be prevailed upon to permit them to examine her chest in the ordinary manner. Dr. Botkine came and created a most favorable impression upon her Majesty until the moment he asked her to remove the bodice of her dress. She at once refused. "If your Majesty de-

clines, I must refuse either to advise or prescribe," replied Botkine; "it is impossible for any one to diagnose the case without a thorough examination," and before the astonished Empress could utter a word he began bowing himself out and backed himself almost into the arms of Alexander II, who was just entering. The young doctor explained what had happened, but the Emperor induced the Czarina to submit to the examination. The remedies subsequently administered by the young physician afforded much relief to the Imperial patient, and from that time forth Dr. Botkine's fortune and fame were made. The Empress would allow no one else to attend her, and he remained with her until her death at Nice. Subsequently he set up in private practice, his usual fee for a consultation being one hundred roubles.

It is not often that legislation of the permissive type meets with such wide-spread adoption as has been the case with the Act for the Notification of Infectious Diseases. Although it only came into force last autumn, it has been voluntarily set to work in seven hundred sanitary districts, including such populous centers as Birmingham, Liverpool, Sheffield, Bristol, Hull, Cardiff, Devonport, Plymouth, and Exeter. Taking these districts, together with the metropolis and the fifty-nine towns which had already obtained similar powers by local acts, it is computed that more than two thirds of the population of England and Wales is subject to the act. Dr. Orme Dudfield, the medical officer for Kensington, draws attention to these striking results in his last report, and suggests that they might not unreasonably be held fully to justify the extension of the same regulations to the whole country. Already the School Board for London is arranging some means by which their district visitors shall be informed of cases which affect the children under their charge. If this could be done all over the country there would be a very rapid diminution in the number of cases of those zymotic diseases which are regarded as almost inseparable from childhood.

Dr. W. M. Russell recommends *Eucalyptus rostrata* in the treatment of seasickness. He has made several experiments with it and found

it almost invariably gave relief where the more orthodox modes of treatment had failed. He recommends, as the most convenient mode of administration, a lozenge containing a grain of the gum in each, three or four lozenges to be taken during each day when there are any signs of the malady.

The artificial ear-drums invented by Dr. Ward-Cousins are being highly spoken of by many aural surgeons. The contrivance consists of a little flesh-colored capsule something like a Welsh hat in shape, of pure cotton fiber (which has been swollen by long immersion, saturated with an antiseptic oil and ether and compressed in a specially constructed machine), weighing only from about one sixth to a quarter of a grain. It is placed on the probe end of a specially constructed instrument, and when inserted in the "deaf" ear is detached by means of a sliding tube, its position in the ear being so adjusted that the crown of the tiny "hat" rests near to, but not in actual contact with the tympanum. The contrivance can with a little practice be manipulated by the patient.

The Khedive recently summoned Dr. H. Crooksbank, who is so well known through Europe through his connection with various red-cross ambulances, and personally presented to him the patent raising him to the rank of pasha. Crooksbank Pasha was summoned to Egypt in 1883, as medical inspector during the cholera epidemic, and was raised in recompense of his services to the grade of Commander of the Medjidieh. He was appointed Director General of Prisons in 1885, and last year, after the battle of Toski, he was charged with the direction of the service having charge of all the Soudanese prisoners and refugees.

LONDON, February, 1890.

Abstracts and Selections.

WASHING OUT THE BLADDER.—In a recent work by D. J. M. Lavaux, he strongly recommends the practice of washing out the bladder by means of hydrostatic pressure, instead of by the action of the syringe. The plan he adopts is similar to that used in what is well known in this country as the "fountain syringe."

He employs a reservoir fixed at a certain

height above the patient, and connected by india-rubber tubing, not with a catheter, but with a metallic tube only three centimeters (about an inch) long. The tube fits into a conical, perforated india-rubber obturator, which is introduced within the urethral orifice. The stream of water is then turned on, and a force sufficient to overcome the "inter-urethral" sphincter being employed, the fluid passes on into the bladder. As soon as a feeling of distension is experienced by the patient, the flow is stopped, and the obturator is removed, and the patient empties the bladder by his own effort. The stream of water is regulated by means of a difference in caliber of the short urethral tubes, of which there are six sizes, the smallest having a channel of one millimeter and a third in diameter, and the largest three millimeters. The force of the water flowing through each of the tubes with reservoir at a given height has been calculated, and one size or another is selected according to the sensibility of the bladder and the resistance of the sphincter in each case.

This plan of injection is said to be applicable to all kinds of cystitis in both sexes, and to be especially useful in painful forms of the affection, in which the introduction of a catheter causes so much pain and irritation. It is also equally applicable for maintaining an aseptic condition of the urinary passages in cases of operation, the essential condition in any case being that the patient should be able to empty the bladder voluntarily. The solutions used by Dr. Lavaux usually contain boric acid or nitrate of silver, varying in strength according to the case. The use of these medicated solutions is preceded or followed by injection of a solution of cocaine whenever the use of that drug is indicated.

Those of our readers who have never adopted this method of introducing liquids into the bladder will be surprised, on attempting it, to find how much may be accomplished by it, and how much suffering it will spare their patients. Not only is this true, but the method offers much greater freedom from risk of septic infection than any which requires the use of a catheter.—*Med. and Surg. Reporter.*

TREATMENT OF CHRONIC CYSTITIS IN WOMEN.—The successful treatment of chronic cystitis in women requires an unusual amount of patience, skill, and tact on the part of the surgeon.

In the first place, functional bladder trouble has to be eliminated from true cystitis. Pain about the pubic region and pelvis generally, frequent and painful micturition, tenesmus, the sensation that the bladder is never emptied

going on day and night for weeks, producing emaciation, exhaustion, and a life of wretchedness, may be due to a variety of causes. It may be purely functional; piles, fissure of the anus, an ulcer of the rectum, or thread-worms in this organ may cause reflex bladder symptoms. Malaria may provoke vesical irritability; sometimes this happens without serious disturbance of the organs of digestion and alterations in the character of the urine. Under such circumstances the only explanation that can be given is the effect of malaria on the nervous system.

We can not help believing true vesical irritability is occasionally a pure neurosis; certainly there are cases which can be explained in no other way. As our knowledge of pathology, however, increases, these cases of neuroses of the bladder, as well as of other organs, will become less frequent; improvement in our knowledge of that pathological change which takes place in the female urethra will surely contribute to this end. Masturbation is another source of vesical disorders; congestion of all the pelvic organs and irritation of the meatus urinarius follow its prolonged practice. Diseases of the uterus, especially of the cervix uteri, and displacements of the womb are common sources of functional vesical disorders. Pelvic abscesses and tumors frequently provoke this trouble. One of the most persistent and painful cases of functional vesical trouble that I have ever seen was in a woman who still menstruated regularly at forty seven years of age. She had constant but not very severe pain until the monthly period came on, when the pain became very severe, and morphine was freely given to relieve it. I removed, in this case, the left ovary and tube, finding upon the latter a neuromatous growth about as big as a marble. She went home in a month entirely well.

It is pretty safe to conclude, when the urine is normal or nearly so, that the disorder is functional, and not true cystitis; again, as a rule, with of course exceptions, when a woman has to void her urine frequently, and suffers pain in the act, but is relieved when the viscus is empty, or, if she attempt to hold the water too long, spasm of the bladder comes on and the urine is involuntarily ejected in spurts, then the trouble is functional, but when there is great and prolonged tenesmus, with pain and straining after the water has all come away, as a rule there is real disease of the bladder or urethra.

The only way to treat functional bladder trouble is of course to correct, if possible, the cause. A displaced womb must be replaced

and retained in its proper position; a diseased womb must be cured, rectal trouble relieved, a foreign body in the bladder removed, etc. It is of the treatment of true cystitis, chronic in character, uncomplicated by other disorders, that I wish to speak.

Generally, in chronic cystitis, the urine is loaded with phosphates and muco-purulent matter; it is also more or less alkaline. Before any operative interference is undertaken the urine should be normally acid; this can generally be accomplished by the free use of citric acid in the shape of lemonade, or lemon juice and water; the mineral acids act more slowly, and benzoic acid is not often well borne by the stomach if administered for too long a period of time. I have seen the use of citric acid in one day remove a thick phosphatic crust on the edges of a vesico-vaginal fistula, or on the wound through the perineum in lateral lithotomy.

The first step in the surgical procedure is to dilate the urethra far enough to temporarily paralyze the sphincter muscle. This should be done while the patient is under the influence of an anesthetic. I use for dilatation a three-bladed urethral speculum, and after expansion has been continued far enough the speculum is removed and the finger introduced into the bladder. The dilatation should be done slowly, twenty or thirty minutes being required before the process is complete; after this a short piece of drainage-tube is introduced into the bladder, and the urine allowed to drip into a cup between the legs of the patient, if she lies on her back, or close to the hip if she is lying on her side. The latter is preferable, as in that position the tube is more easily retained. The tube should be introduced into the bladder only far enough to drain the organ, and the free end should be just long enough to drip the water into the cup. If too long, it will be pulled out of the bladder by its own weight. The object of the treatment is to give the bladder complete rest. The tube should be kept clean by occasionally washing or changing it. It is a good plan to wash the bladder out through the tube once or twice a day with hot water. I published an account of the treatment of obstinate chronic cystitis by drainage in 1874. Since that time I have repeatedly resorted to it, and with great success. For the last three or four years I have added dilatation of the urethra to the drainage, in the way of making physiological rest of the organ more complete. If the paralysis of the canal and sphincter pass off before the cure is effected, dilatation must be repeated.—*Dr. Hunter McGuire, Canada Medical Record.*

DIPHTHERIA.—Henoch (*Munch. med. Wochenschr.*, October 22, 1889, 747) reports his experience in 192 cases of diphtheria, from which number he carefully excluded all doubtful cases and all instances of scarlatinal necrosis. Scarlatinal diphtheria he considers an affection entirely distinct from true diphtheria. There are certainly instances in which scarlatina and diphtheria are combined, but either the former has appeared in cases of diphtheria well underway or in the stage of decline, or the latter affection has developed in the later stages of scarlatina, certainly after the third or fourth day. Only in such cases of scarlatina does diphtheritic paralysis appear.

To distinguish diphtheria from angina lacunaris is often not possible until after continued observation. In some instances, indeed, it is impossible, namely, in those in which there occurs a deposition of fibrin in addition to the collection of pus in the depressions of the tonsils. In these cases the bacteriological examination would give certainty, if only we knew more accurately the nature of the bacillus and of the pathological anatomy of the affection. Diphtheria can, indeed, only be recognized positively when all or several of the cardinal symptoms are united, such as bilateral distribution of the membrane in the throat, involvement of the soft palate, uvula, etc., albuminuria, involvement of the nasal cavities; contagiousness. Swelling of the glands and fever appear in many simple anginas as well.

In 110 of the cases the membrane was confined to the pharynx; in 82 it spread to the larynx or still further down. In 12 of these latter tracheotomy was not performed on account of various contra-indications, while of the remaining 70 on whom the operation was done, 9 recovered, a percentage of 13. Many of the cases died of pneumonia, bronchitis, collapse, or heart failure, after the operation had apparently had a good result. Henoch attributes this low percentage of recoveries not to a severe form of the disease, but to the fact that more than half of the children were already suffering from different constitutional diseases, others were very poorly nourished, and many were quite young, while, in addition to these factors, the hygiene of the hospital was extremely bad. One great source of error in statistics is, that writers include in them the cases of true croup, and thus greatly increase the apparent number of recoveries. Henoch has seen 36 cases of croup, of which 24 (66 per cent) recovered after tracheotomy.

Of 110 cases of pharyngeal diphtheria, 32 died—a favorable percentage.

The degree of fever proves nothing as to the severity of diphtheria. The swelling of the glands usually undergoes resolution; it is seldom that suppuration takes place as in scarlatina.

The diphtheritic membrane is of prognostic significance. Membrane on the hard palate is an exceedingly unfavorable sign, while involvement of the cheeks, tongue, lips, genitals, and anus also makes the prognosis bad. On the other hand, the spread of the membrane to the nose is not especially unfavorable even in bad cases.

Diphtheritic nephritis appears from the third to the fifth day, and is characterized by tubercasts, epithelium, and a few red blood-cells, in contradistinction to scarlatina, in which the number of blood-cells is large. The appearance of albumen not until a later period of the disease is very unusual, and can not be affirmed unless the presence of scarlatina or the persistence of an early albuminuria can be absolutely excluded. Henoch has seen this late nephritis but twice.

Edema is much rarer than in scarlatina; uremia is very exceptional; affection of the joints has come to his observation but once. A croupy cough and stridor form no indications whatever for tracheotomy. The author has tried various methods of treatment, and found them all useless in severe cases.—*American Journal of Medical Science.*

THE INFLUENCE OF DILUTION ON THE ACTIVITY OF THE TUBERCULOUS POISON.—Bollinger (*Munch. med. Wochenschrift*, 1889, No. 43, 731) communicates the results of the important experiments conducted in his laboratory by Gedhardt during the past two years. As it has been shown by Hirschberger that fifty-five per cent of all tubercular cows produces an infectious milk, the first step was to determine the infectiousness of the ordinary market milk. Samples obtained from ten different places of sale, and inoculated on as many guinea-pigs, gave entirely negative results. Inoculations were next made with milk taken directly from the healthy udders of tubercular cows after their slaughter, and diluted to different degrees. It was thus found in three cases that dilutions of 1-40, 1-50, and 1-100 respectively were required to destroy the virulence. Both these tests prove that the virulent milk of tubercular cows loses its infectiousness through a certain degree of dilution. The mixing of the diseased milk

with that of many healthy cows thus lessens the danger, as also does the dilution usually employed in preparing milk for infants. Milk coming from large establishments is always, therefore, to be preferred to that from a single cow.

A second series of experiments was made on the influence of dilution on the virulence of the sputum. The results showed that, as compared with milk, the sputum was excessively infectious, and that not even a dilution of 1-100,000 served to diminish its poisonousness, whether communicated subcutaneously, by inhalation, or by intra-peritoneal inoculation. On the other hand, 32 minims of the tubercular sputum in a dilution of 1-8 failed of any positive result when given with the food. As different specimens of sputum differ naturally in the number of bacilli contained, Gedhardt next made similar experiments with pure cultures of supposedly the same strength. The results showed that 16 minims of a dilution of 1-400,000 fully preserved its virulence, as did 8 minims of the same when inhaled. The general conclusions reached were that the greater the amount of the tubercular poison taken into the system the more rapidly is it spread throughout the body.

An attempt made to estimate the number of bacilli in the sputum showed that 16 minims contained about 810,000 to 960,000. According to this estimate, about 820 bacilli are required to set up a fatal tuberculosis in a guinea-pig.

The subcutaneous connective tissue, the peritoneum, and the lungs are especially and about equally predisposed to the reception and increase of bacilli, while the digestive tract is decidedly more resistant. The order of the organs attacked by artificial infection is about as follows: lymphatic glands, spleen, lungs, liver, and, lastly, kidneys and genitals. The place where the disease first develops is, however, not always dependent on the point of entrance of the bacilli; for example, a pulmonary tuberculosis is not always to be attributed to an infection by inhalation.

The experiments also tend to prove the existence of an individual predisposition, since some guinea-pigs were unaffected by a stronger dilution than that which poisoned others.

It is certainly proved that a fluid may be virulent, although the few tubercle bacilli present may escape microscopic detection. Consequently the failure to discover bacilli in the sputum is not a proof of their absence, and inoculation would be a much more delicate test. —*Ibid.*

CHLORALAMIDE AS A HYPNOTIC.—Mr. Geo. P. Cope, in the Dublin Journal of Medical Science, for February, 1890, describes his experience with chloralamide, and says: "I think these cases demonstrate that chloralamide is undoubtedly a sleep producing agent, that the sleep created varies from five to eight hours, and appears to be sound and refreshing. A dose of 25 to 35 grains was sufficient to cause sleep in patients suffering from melancholia and chronic mania, but in cases of acute mania small doses had no effect, and sleep was not produced by less than from 40 to 50 grains. No recognized evil effects followed the continued use of this drug for eight days, and only one out of twenty-five persons under treatment with chloralamide was noticed to be suffering from gastric disturbances, viz., giddiness and sickness, with dry, brown tongue, which followed six hours after a draught, when no sleep ensued.

In comparison with other hypnotics, chloralamide, as it consists of a combination of chloral, somewhat resembles it in its action. Both induce sleep, lasting from five to eight hours, but they appear to possess little analgesic influence unless when they cause sleep. Unlike opium, they will not relieve pain. The time that elapses before sleep is produced varies from thirty minutes to an hour, and the sleep appears to be natural and refreshing. Its action on the circulation is stated to be quite the opposite of that of chloral hydrate, which acts directly upon the blood pressure, slowing the pulse and respiration, and producing poisonous effects, by direct action on the cardiac ganglia and respiratory center, causing paralysis of the heart and cessation of respiration. Chloralamide appears, as far as I have been able to ascertain, to be free from such danger. In five cases—one of pneumonia, one of phthisis, one of cardiac disease, and two of insomnia—I obtained sphygmographic tracings before and after its administration, and the blood pressure was not lowered in any of them, while the respiration and temperature remained the same. Dr. Daniel Leech (British Medical Journal, November 2, 1889), writing about chloralamide, states that "it seems probable that the formamide element, containing as it does a substitute NH group, will stimulate the circulatory and respiratory centers in the medulla, thus tending to counteract the depressing influence of chloral on them." Reichmann noticed that with doses ranging from 30 to 60 grains the blood pressure was not lowered.

Comparing chloralamide with sulphonal,

which has been extensively used in the Richmond District Lunatic Asylum, with very satisfactory results, for the last year and a half, I need not dwell upon the advantages of the latter as a hypnotic agent, because I have practically nothing to add to the observations made by Dr. Conolly Norman (See Dublin Journal of Medical Science, January, 1889), and fully confirmed by further experience. Speaking of sulphonal, Dr. Norman states that "its disadvantages are, (1) that it is bulky and practically insoluble, therefore difficult to administer, and that, perhaps, owing to its insolubility, (2) it is slow in action," and its price is high. Chloralamide, on the contrary, is not bulky, is tolerably soluble, quick in action (thirty minutes to one hour), and is now cheaper than sulphonal has ever yet become.

On the whole, it seems that this new hypnotic is well worthy of a trial, having proved so far safe and reliable.—*Medical and Surgical Reporter*.

THE VALUE OF THE PHENYLHYDRAZIN TEST FOR SUGAR.—Josef Geyer (*Wien. med. Presse*, 1889, No. 43, 1686) says that the use of phenylhydrazin as a test for sugar was first proposed by Fischer, and has been warmly recommended by Von Jaksch, who considers it very reliable for even the smallest quantities of sugar. Rosenfeld, too, has recently examined the reaction and estimates it as the most delicate and reliable. This would make the substance most valuable in the recognition of sugar, since existing methods reveal small quantities of it with difficulty. It is, therefore, very important to determine absolutely whether there is any allied substance which could produce a combination with phenylhydrazin resembling phenylglycosazon. Thierfelder has already shown that hydro-chlorate of phenylhydrazin and the potassium salt of glycuronic acid will produce a compound, when treated according to Fischer's method, which resembles and has the same characteristics as phenylglycosazon, and can easily be confounded with it. Now, glycuronic acid occurs in the urine, and it is probable, as Flückiger has shown, that some one of its combinations helps to make up the reducing substance found in normal urine.

In order to elucidate the matter, Geyer has studied carefully the relations of glycuronic acid to phenylhydrazin, in order to discover whether they actually formed a compound resembling phenylglycosazon. He prepared glycuronic acid by a method

which he describes in detail, and found that it deviated the plane of polarized light to the right—though its compounds deviated it to the left—and reduced copper on heating in alkaline solution, both of which effects are accomplished by sugar also. The reduction of the copper by the acid, however, differed from that by the sugar in that it occurred only after prolonged boiling, and often not until cooling had taken place. Glycuronic acid or its soda salt, treated with phenylhydrazin after the manner of Jaksch, gave yellow crystals so resembling in appearance and solubility those of phenylglycosazon that no difference could be detected. To apply these facts to the examination of urine, the author examined a series of specimens obtained from cases in which the phenylhydrazin test had given a positive result, yet in which he thought sugar was absent. In order to determine positively whether sugar was present, he found that the examination by fermentation and by the polariscope were the only reliable methods. As these tests, however, are only delicate to 0.1 per cent of sugar, it was first necessary to isolate and concentrate it, which he accomplished by the Abéles-Ludwig lead method. Fourteen cases were thoroughly examined, and though all of them contained a substance resembling phenylglycosazon, and gave a positive reaction with Trommers' test, only four responded to the fermentation test, and with the polariscope deviated light to the right. He concludes, therefore, that phenylhydrazin is not a reliable test for sugar, and can give positive results with normal urine, and that fermentation and polarized light are the only accurate means at our disposal.—*American Journal of Medical Science*.

THE ANTISEPSIS OF THE RENAL PASSAGES BY THE INTERNAL USE OF SALOL.—In the intestinal tube, says the Therapeutic Gazette, February 15, 1890, as a consequence of the action of the pancreatic juice, salol splits up into carbolic and salicylic acids, which are then eliminated by the kidneys, carbolic acid without being changed, salicylic acid after combining with sodium. Investigations by Nencki, Sahli, and Lépine have proved the truth of this statement beyond contradiction, and these writers have, as a consequence, recommended its internal use in "internal disinfection" in cholera, typhoid fever, and bacterial diseases. Dr. Dreytuss (*Wiener Medizinische Blätter*, December 19, 1889), bearing these facts in mind, has recommended its use internally as a means of inducing the passage of an antiseptic

fluid through the kidneys, ureters, bladder, and urethra; and claims that it acts in a much more intensive manner and covers a wider field than can be accomplished through an injection of antiseptic fluid. Sahli further has shown that the urine of patients who have taken salol internally is aseptic, and that salol in large doses is well borne and never produces toxic symptoms. It is, therefore, quite as suitable for producing antiseptis in the urinary passages as naphthol is for the antiseptis of the intestinal tract. Dreyfuss has employed salol, either alone or in composition with various balsamics, in blemorrhæa, the full dose varying from 75 to 120 grains. Even in acute cases, treated at the very outset, this mode of treatment rapidly diminished the secretion, and in some few cases arrested it within a few days. Its effects are especially marked in combination with the use of eubeds or copaiba.

Finally, Dreyfuss recommends this use of salol in operations upon the urinary organs, for in this way the urine is kept aseptic, and one source of danger is thus avoided.

RUPTURED TUBAL PREGNANCY.—Sutton (*Lancet*, November 16, 1889) reports a case in which cessation of menstruation, collapse, and swelling of the abdomen had been symptoms. Examination revealed the uterus empty, ill-defined swelling in both iliac fossæ extending to the costal cartilages on the right side; there was slight elevation of temperature. Laparotomy disclosed a putrid blood-clot extending from the pelvis to the liver; free bleeding from the right broad ligament. The ligament was transfixed, the right tube and ovary removed, the abdomen irrigated, and a glass tube inserted for three days; recovery followed. The ovary contained a corpus luteum of pregnancy, and a rounded mass removed contained an apoplectic ovum with a fetus of eight weeks. Sutton believes that the sudden enlargement of an apoplectic ovum frequently ruptures a tube; no extra-peritoneal hematocele should be attributed to ruptured tubal pregnancy, however, unless membranes, a fetus, or both are present. He also reported an abdominal section at which a hematocele, encysted in the great omentum, was removed with the tube and ovary. Rapture had occurred an inch from the abdominal end of the tube; an apoplectic ovum lay in the hematocele, as large as a chestnut. The patient recovered.

In discussion (Royal Medical and Chirurgical Society), Priestley thought that cases of pure hematocele generally occurred, and should be let alone unless suppuration occur-

red. Intra-peritoneal rupture required operation. When in doubt he would not operate.

Duncan had recently seen in a year twelve cases with clinical signs of tubal pregnancy which recovered without operation. He had seen a case recover from marked collapse, and eight months after a dead fetus was removed from the abdomen. Hematocele was no proof of tubal pregnancy.

Herman considered an apoplectic ovum one which had slight bleeding into the chorion.

Cullingworth had seen many hematoceles; in two he found by palpation a large tube. Abdominal section revealed no rupture, but in one hemato-salpinx, in the other ruptured varicose vein. He would operate only when a large tube could be detected and the cause of hematocele still remained.

Walter reported a case of large intra-peritoneal clot reaching nearly to the umbilicus. When tapped, one and a half pints of fluid escaped. A clot as large as a fist was in the bottom of the cyst; the clot was lined with chorion, in which the viscera of a six weeks' fetus were found; it was an apoplectic ovum.

In conclusion, Sutton believed that in apoplectic ovum the effusion occurred into the decidua before the placental circulation was formed. Amniotic hemorrhage was not necessary to diagnosticate apoplectic ovum. The conditions were analogous to cerebral apoplexy. The ovum from the uterus contained a cavity with a fetus or cord; the ovum from a tube showed a compressed amniotic cavity. Hemorrhage generally occurred into the decidua before the ovum left the tube.—*American Jour. of Med. Science.*

THE SYMPTOMS OF DISEASE OF THE PANCREAS.—Considerable interest has been excited in the subject of diseases and injuries of the pancreas by the contributions of Senn and of Fitz in this country, and by those of Lancereaux, Minkowski, and Von Mering, and others of Europe. The pancreas is an organ which is rarely subject to organic disease, or to injury; nevertheless, it is not entirely free from ills, and it is likely that minor and functional disorders are not so very rare.

In a recent review of this subject by M. F. de Grandmaison (*Gazette des Hôpitaux*, January 4, 1890), the following diseases are said to affect the pancreas: Acute and chronic pancreatitis, abscess, lithiasis, apoplexies, and tumors, including cysts. To this may be added lipomatosis, degenera-

tive atrophies, disorder secondary to compression, and functional affections.

Of these somewhat numerous affections, it is only chronic pancreatitis, lithiasis, tumors, and perhaps functional or secondary disorders from compression that can be at present recognized. All the acute disorders, except perhaps abscess, are practically unrecognizable. The cardinal symptoms of pancreatic disease are stearrhea, glycosuria, phenomena of compression, and rapid emaciation.

The stearrhea was first noted as a symptom of impaired function of the pancreas by Cl. Bernard, who produced it by experiments on animals. It has also been noted clinically by Kuntzmann, Bright, Unckel, Ancelet, and others. Sometimes there is associated with it fatty vomiting. The fatty stools persist even when fat has been withdrawn from the food. However, stearrhea may be absent in severe pancreatic disease, and it is not by any means a pathognomonic sign.

Glycosuria has been produced experimentally in animals by destruction or injury of the pancreas, and according to Lancereaux and his pupil Lapierre, it may be an evidence of pancreatic disease. M. Lancereaux, indeed, asserts that there are three forms of diabetes, viz: (1) The nervous, (2) that occurring in the obese, and (3) the emaciative form, the latter being due to chronic pancreatitis or pancreatic lithiasis.

The nervous form, of diabetes results from emotional shocks, traumatism, combined with lithemic states, and it is usually temporary. It is, in fact, a glycosuria of symptomatic character only. The diabetes of the obese is the more common form; it comes on slowly and progresses slowly.

The diabetes with emaciation comes on suddenly, the patients rapidly lose weight, the amount of sugar in the urine is large (50 to 85 grams daily), and the duration of the disease is not long, the patients dying usually of tuberculosis. The skin is rough and dry, but the boils and carbuncles which occur in the diabetes of the fat are not observed here.

The symptoms of pancreatic disease due to compression are chiefly those resulting from compression of the bile duct. The gall-bladder is distended, the liver remaining of normal size, and icterus gradually develops.

The general symptoms in organic pancreatic disease are those of cachexia and great emaciation. Often there is epigastric pain and intestinal dyspepsia, with much flatulence and loose stools.

As for the special significance of the above symptoms we are still much in the dark. Stearrhea, we are told, is rare in pancreatic lithiasis, but more common in primary cancer of the head of the pancreas.

Diabetes with rapid emaciation, if indicative of any pancreatic disease, points rather to lithiasis and secondary pancreatic inflammation and degeneration.—*Medical Record*.

SURGICAL ASPECTS OF HEPATIC ABSCESS.—Text-books affirm that hepatic abscess is a rare affection in this latitude; experience, however, has taught surgeons that this is not strictly true; and abscess of the liver, being a more common affection than might be supposed, is often passed over unrecognized. It is well to bear in mind that the thoracic parietes close around a large part of the abdominal organs, and Rickman J. Godlee, M. S., F. R. C. P. (*British Medical Journal*, January 11, 18, 25, 1890), calls attention to the signs of hepatic abscess which many clinicians are apt to refer to disease of organs above the diaphragm. After some preliminary remarks and discussing multiple pyemic abscess, pyelophletis, suppuration and tropical abscess, with a report of twenty-four cases, with remarks on each case, he closes with the following summary:

1. Pyemic abscesses do not call for surgical interference, or if in rare cases one should point, it is only opened to relieve symptoms, but without hope of doing permanent good.

2. The same observations apply to abscesses resulting from suppurative phlebitis of the portal vein.

3. Multiple abscesses associated with dysentery or ulceration of the bowels are very unfavorable for surgical treatment. They must, however, be opened and treated on the same lines as the single or tropical abscess, because they can not be certainly diagnosed.

4. Single abscess of the liver, whether tropical or not, must, if it approach the surface, be opened, the following precautions being adopted:

- (a) If it is present at the epigastrium, the presence of adhesions must be ascertained before incising the liver.

- (b) If through the chest wall, a spot must be chosen below the normal limit of the pleura; but, if by chance either pleura or peritoneum be opened, the opening must be closed with a double row of stitches before incising the liver.

- (c) Strict antiseptic precautions must be throughout adopted, either carbolic acid or

some slightly soluble salt of mercury being employed for the dressings.

(d) The tube must be of large size at first, and a tube of some sort must be kept in until the discharge is reduced to a very minute quantity.

If the abscess have burst into the lung, pleura, pericardium, peritoneum, or kidney, and the position of the abscess can be clearly determined, it must be opened without delay. If the position of an abscess be only suspected and the patient be losing ground, it is right to puncture the liver in the most likely situations, bearing in mind that, though usually quite harmless, a slight amount of risk accompanies this very trivial operation. This rule applies to cases in which the abscess has ruptured into any of the cavities enumerated above. If, on the other hand, whether the abscess have ruptured or not, there are means of diagnosing the whereabouts of the matter, and the patient be not losing or even gaining ground, the surgeon should hold his hand for a time.

5. Hydatids of the upper and back part of the liver are to be treated upon the same lines; but in cases of this sort, and in those of subdiaphragmatic abscess, it must be remembered that the diaphragm may be pushed up to a very great height, thus closely simulating intrapleural suppuration.

6. Empyema, pericarditis, and peritonitis caused by rupture of a hepatic abscess or hydatid must be promptly dealt with on general principles.—*Maryland Med. Jour.*

EXTIRPATION OF THE BLADDER AND TOTAL EXCISION OF THE VESICAL MUCOUS MEMBRANE.—Brohl communicates (*Wiener Med. Presse*, Nos. 27 and 28, 1889) four cases in which Bardenheuer for the first time undertook the extirpation of the entire bladder in the living human subject. They are briefly as follows: (1) A man, fifty-seven years of age, had a swelling occupying the whole fundus of the bladder, and extending more to the right than to the left side. The bladder was removed. For ten days the wound looked well, and was rapidly granulating, but death from uremia occurred on the fourteenth day. (2) A girl, seven years of age, had primary vesical tuberculosis. The whole mucous membrane of the bladder was excised. Healing was complete. She lived one and a half years, and died of a return of the disease in the peritoneum. (3) A man, sixty-four years of age, was found to have infiltration of the vesical mucous membrane, with little grayish white nodules of pin-head size, and a large papil-

omatous swelling of the posterior wall of the bladder. The entire mucous surface and all that portion of the wall of the bladder containing the tumor was removed. There were several complications, but he recovered with a urinary fistula. (4) A man, thirty years of age, had little tumors of the size of cherries studding his bladder wall, which had undergone cicatricial change in the vicinity of the ureters. Total excision of the mucous membrane was performed. Complete healing followed.—*American Journal of Medical Science.*

HEREDITARY CHOREA.—Suckling (quoted in *Practitioner*, November, 1889, from *Birmingham Medical Review*, September, 1889) reports a case of hereditary chorea in a previously healthy man, thirty-nine years old. For three to four years he had continually suffered from jerking of the hands and feet, stumbling, and "sniffing due to a spasmodic action of the diaphragm. The shoulders were much affected, and the tongue and face slightly so. The speech was not involved and the knee-jerk was normal. The mother of the patient died at fifty-six years, having been choreic for sixteen years, and finally, quite helpless and unable to feed herself. Suckling also saw one of the patient's sisters, aged thirty-eight years, who had had the disease for five years. The patient's youngest daughter, of about twelve years, was also affected by the disease.

The author describes the affection as distinctly hereditary, occurring chiefly in adults, and never skipping a generation. The movements can at first be directed by the will, but finally become quite involuntary, until the patient becomes bedridden and demented. The affection may remit or exacerbate, but never disappears.

THE NEW ANTISEPTIC ARTIFICIAL MEMBRANA TYMPANI.—During the past twelve months I have extensively employed in my aural practice the new antiseptic artificial membrane, with excellent results. In many cases of chronic middle-ear disease marked improvement has followed its insertion into the meatus, but the most striking successes have always occurred in patients laboring under perforation of the membrana tympani. I have tested the value of my artificial drumhead in 130 cases of this disease, and, with only five or six exceptions, the results were extremely satisfactory. I have found it sometimes useful in cases of accommodative loss from alterations in the contents of the tympanum, in which the eustachian tube was unobstructed and the naso-pharynx fairly healthy.

The immediate improvement in the hearing-power is often a matter of much satisfaction. The intensity of the sonorous vibration is at once increased, and sounds can be clearly defined which before appeared to be only confusion. The sensibility of the organ is magnified, and the sense of hearing is so much changed that the patient does not appear deaf during ordinary conversation. The hearing distance is remarkably increased, and, in place of earnest looks and strained attention, the countenance expresses both pleasure and repose. Several patients have informed me that, with the assistance of the artificial membrane, sounds had been rendered audible which they had lost for many years. Others, laboring under perforation, but without serious deafness, have used them as ear protectors with great comfort. In such cases the artificial drumhead forms a screen between the middle ear and external meatus, and acts as an efficient shield during exposure.

Sometimes good results can be obtained by simply adjusting the artificial membrane and replacing it as often as necessary. But, in a large majority of cases, perforation of the tympanic membrane is associated with chronic suppurative disease of the middle ear, so that other important remedial measures must be diligently practiced, and the ear must always be thoroughly deodorized before the introduction of the artificial drumhead. I always tell my patients that they may hope for progressive improvement, but that they must not expect to realize the full amount of relief until they have regularly carried out the local treatment and worn the membrane for two or three months.

During the last half-century a large number of artificial drumheads have been introduced by different surgeons, and probably all of them have been found more or less useful in suitable cases; but not one of these devices has obtained a wide and general adoption. The ordinary cotton pellet has been extensively recommended by aurists, but it is my experience that few patients can be induced to persevere with it, because it is so liable to get out of position, and requires so much dexterity in putting it in and taking it out of the meatus.

On the other hand, the new antiseptic artificial membrane presents many practical advantages:

1. It decidedly improves the hearing power for distance and conversation, and this appears to be due, at least in some measure, to its peculiar shape.

2. It is especially adapted for self-application, and can be easily placed in the right position and readily removed.

3. It is extremely light, and causes no sensation or irritation in the meatus by its presence.

4. It is serviceable as an efficient ear-protector, and acts as a screen for maintaining the moisture of the exposed tympanic cavity.

5. It is manufactured in different sizes, to suit the varying capacity of the external ear, and when once placed in position it is not liable to displacement.

6. It is obtainable at a trifling cost, so that a new artificial membrane can be used as often as necessary.—*Dr. John Ward Cousins, American Journal of Medical Sciences.*

BACTERIAL STUDIES ON THE INFLUENZA AND ITS COMPLICATING PNEUMONIA—*Dr. T. Mitchell Prudden*, in an article on the present epidemic, in the *New York Medical Record*, February 15, 1890, says there are so many features which the disease called familiarly *la grippe* shares with the common and more completely studied acute infectious diseases that medical men have pretty generally agreed in classing it with these, in spite of its marked peculiarities and the wide variation in its manifestations. Furthermore, so much positive knowledge has been recently accumulated regarding the etiology of many of the acute infectious diseases that the assumption that the epidemic influenza is probably caused by some kind of micro-organism seems fairly justifiable on the ground of its clinical manifestations alone.

We have as yet no positive knowledge whatsoever as to the exact nature of the assumed micro-organism. By the aid of the new technique for the study of micro-organisms no investigations have yet been made on this subject whose results have been formulated and published.

Now it so happens that nearly all of the acute infectious diseases whose etiology has been satisfactorily established on a basis of actual observation and experiment have been proved to be caused by bacteria; that is to say, by micro-organisms which belong to a particular class or group.

There seems to be, both in the clinical manifestations and in the mode of spread of *la grippe*, much to suggest, not, indeed, that in its etiology it may be allied to malaria, but that it may stand related in its etiology to the better known acute infectious diseases such as malaria does—that is, may be due to a micro-organism, but to one of an entirely different class. The *plasmidium malarie* belongs not among the bacteria or their close allies at all, but among an entirely different group of living beings.

We might apparently have gone on trying to make something grow out of malarial blood upon our nutrient gelatine and agar, etc., indefinitely, if the constant presence of the disease with us had not permitted such morphological studies as have led to fairly definite notions as to its etiology, without recourse to the more subtle culture methods.

Whatever the truth of the matter may be concerning the assumed germ of epidemic influenza, it is evident that studies with the current bacteriological technique should not be neglected until they are proven to be useless, or some better method of observation is made known. For even negative results may throw a side light on this or closely allied problems.

The results of Dr. Prudden's studies may be summed up in a very few words. In two of the three cases of influenza associated with bronchitis a very large number of streptococcus pyogenes were found; this was the prevailing species. All the rest were scattering forms, commonly found in the sputum in bronchitis, most of them the ordinary aërial bacteria. In another case of bronchitis large numbers of the diplococcus pneumoniae of Fraenkel and Weichselbaum were found, associated with a few staphylococcus pyogenes aureus and several scattering forms.

In the secretion from the nose in one case with coryza were a few of the staphylococcus pyogenes aureus, while all the rest, which were not numerous, were scattering forms.

Pneumonia has been a frequent, and in many cases a serious complication in our recent epidemic. Dr. Prudden has examined by the culture methods the sputum from five cases suffering from a prolonged and irregular pneumonia immediately following the influenza attack, all hospital cases; also the irregularly hepatized lung from a fatal case of pneumonia following influenza, and six cases of pneumonia following influenza in all.

It now we sum up the whole series of Dr. Prudden's examinations, we find that in the secretions from seven cases of simple influenza no special new forms of bacteria were discovered which there is reason to believe have any thing to do with causing the disease. The only pathogenic species which were found were well-known pyogenic bacteria, staphylococcus pyogenes aureus, streptococcus pyogenes (in four of the cases), and the diplococcus pneumoniae (in one of the cases). In the pneumonia following the

influenza (six cases) no special new forms of bacteria were found, but the same pyogenic forms (in five of the cases) and the diplococcus pneumoniae (five cases).

Thus, while we gain no positive new light on the etiology of epidemic influenza in this series of examinations, we are able, from the results of the studies on the pneumonia which accompanies it, to establish the probability that the pneumonia, although apt to be irregular in its course and atypical in its morphology, is usually due to the same bacterial agency as is at work in the ordinary acute lobar pneumonia. How much this may be further complicated by the frequent presence of the pyogenic bacteria is a question which must be settled by further studies on the general relationship of these organisms to inflammations of the respiratory organs and to other mucous membranes.

It would seem, furthermore, that the relationship of the influenza to the pneumonia is that of a predisposing factor only—a conclusion, indeed, toward which clinical investigators have been already led by a different line of observations.

The phase of pneumonia which this epidemic has brought into prominence, is instructive in its relationship to the ordinary typical acute lobar pneumonia. It seems pretty well established that the diplococcus pneumoniae of Fraenkel and Weichselbaum is the most common, if not the exclusive, primary etiological factor in acute lobar pneumonia, judging from its constant occurrence in the affected regions, from its pathogenic effects upon animals in experimental inoculation, and from its frequent occurrence in complicating lesions.

The very frequent occurrence of this micro-organism in the saliva of healthy persons not only does not militate against its etiological importance, but furnishes a most satisfactory rationale of the occurrence of the disease. For under ordinary conditions the diplococcus pneumoniae appears to be quite harmless in the saliva. It is only when the suitable predisposing conditions—which we recognize in injuries, and in exposure to cold and wet, but which in many cases we do not understand at all—are fulfilled, that the growth of the germ in the lungs and its accompanying lesions can occur.

It would seem that the influenza, with its tendency to an involvement of the respiratory passages, furnishes, not indeed the common, but an analogous predisposing condition leading to an atypical pneumonia. This form of predisposition to pneumonia seems to be in many respects similar to that which

measles furnishes in children to the incursions of varying forms of pulmonary inflammation whose determining etiological factors have not yet been sufficiently studied.

It may be remarked, in conclusion, that to the negative results of these studies on the influenza only such importance should be attached as the small number of cases examined will justify. We simply learn that in these few cases the use of the culture methods and media commonly employed in the study of bacteria and allied forms of micro-organisms has brought to light no living germs which there is reason to believe has any thing to do with causing the disease.

But this negative result should leave us entirely unprejudiced toward any other series of observations which, with more abundant material and a more refined or favorably applied technique, may promise a solution of the problem.—*Med. and Surg. Reporter*.

THE OPERATIVE TREATMENT OF ERYSIPELAS.—The method of treating erysipelas devised by Dr. Kraske, and modified by Drs. Riedel and Lauenstein, has been employed with marked success in a large number of cases in Germany, and has lately been strongly recommended by Drs. Meyer and Seibert, of New York. It consists in surrounding the erysipelatous area with a broad zone of numerous fine incisions intersecting one another, similar to those made in vaccination, and sufficiently deep to draw blood. These incisions are made at a distance of one or two inches from the borders of the diseased parts in tissues yet healthy, strict antiseptic precautions being observed throughout the entire operation. A solution of corrosive sublimate 1-1,000 or 1-2,000 is then rubbed into the wound and a dressing of absorbent gauze and cotton applied with sufficient frequency to keep the parts moist with the antiseptic solution.

The object in locating the incisions in healthy tissues is to prevent their invasion by Fehleisen's microbe, which is present in the lymphatics of the diseased area. The scarification and subsequent disinfection of the healthy tissues tend to keep them in a thoroughly aseptic condition.

In a recent number of the New York Medical Journal, Prof. Seibert reported three cases of erysipelas of unusual severity, occurring in children of debilitated constitution, in whom this method of treatment proved markedly successful. Its beneficial effects were seen, not only in the arrest of the disease at the borders of the incision markings, but also in the prompt reduc-

tion of temperature and the general improvement of the patient. Prof. Seibert operated without an anesthetic, and for the purpose of scarification employed a vaccination harrow, which is a sharp pointed metallic comb. He is positive that this method of treatment will cure every case of erysipelas, if employed in due season.

This statement of Prof. Seibert is corroborated by the testimony of Prof. Meyer, of this city, who, in a paper published in the *Medizinische Monatschrift*, lays down the dictum that it is the duty of the physician in every case of erysipelas of the extremities, or severe erysipelas of the face, to resort promptly to the knife, and not to place dependence upon symptomatic treatment. In an unusually severe instance of the disease reported by him, the erysipelas overstepped the limiting zone, and the scarifications had to be repeated, but the operation each time was promptly followed by a fall of temperature and a marked alleviation of the general symptoms.

In view of these recommendations by two such careful and competent observers, it would seem that this method of treating erysipelas should enjoy a greater popularity than heretofore, especially as it is based upon a rational conception of the disease, and as no other local treatment has been found equally effective.—*International Jour. of Surgery*.

TURPENTINE IN POST PARTUM HEMORRHAGE. "For for a number years," writes a correspondent, "I have used spirits of turpentine in *post-partum* hemorrhage, and in every case with the best results. When the ordinary means, that is, friction over the uterus, irritation of the uterus by introduction of the fingers, cold hypodermic injection of ergotine, etc., failed, by saturating a piece of lint with the turpentine, and introducing it with my hand into the uterus and holding it against the walls, rapid contraction took place, and all hemorrhage instantly ceased. In one or two cases, when the patient was almost pulseless, it seemed to act as a stimulant. On no occasion did its action fail, nor did it cause the slightest inconvenience, except in one, when the side of the patient's thigh was slightly blistered by some that came in contact with it, but it gave very little annoyance. I consider it to be much quicker and safer in its action than any other remedy; it does not cause any injurious result, and besides it is much more easily applied. In country practice, getting hot water or using injections often entails loss of valuable time.—*Lancet*.

The American Practitioner and News

"NEC TENUI PENNĀ."

Vol. IX. SATURDAY, MARCH 15, 1890. No. 6.

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H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the EDITORS OF THE AMERICAN PRACTITIONER AND NEWS, Louisville, Ky.

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CHEMICAL VACCINATION AGAINST YELLOW FEVER.

Two doctors of Bogota, Castaneda and Borda by name, believe that they have made a discovery of prophylactic value in the management of yellow fever. They take as the basis of their study the hypothesis that the symptoms and lesions of zymotic disease are due not to the damage done the blood and tissues by the invasion of rapidly multiplying specific microbes, but to the deleterious effects of ptomaines or leucomaines (organic poisons formed during the process of microbial proliferation), and the fact, as recently demonstrated by MM. Charrin and Ruffer to the Paris Biological Society, that the introduction of the bacillus pyocyaneus into the system of rabbits does result in the formation of organic poisons which possess the property of producing the same physiological effects as the bacillus itself. Now the enterprising chemist has found these toxic alkaloids in the urine of rabbits suffering with the "pyocyanic disease," and believing that if the above is true of one zymotic affection it must be true of all, the able theorists conceived the brilliant idea that yellow fever might be induced in mild form (*a la* Jenner with cow-pox) by injecting the urine of the yellow fever subject into the circulation of those who

by geographical situation might be in danger of developing the disease. Observations were accordingly made by putting animals to the *experimentum crucis* with the urine, sterilized and non-sterilized, of yellow fever patients, and an opportunity to test the truth of the theory upon man was eagerly awaited. It came in due time.

"A young man, about to settle in Cúcuta—a place which, it seems, has very evil reputation as a perfect hotbed of yellow fever—requested that an attempt might be made to afford him protection by means of 'chemical vaccination.' Accordingly, 0.02 centigram (*sic*) of sterilized urine from a yellow fever patient dissolved in a gram of di-tilled water was injected into his deltoid; this was followed by thirst, insomnia, headache, conjunctival redness, dilatation of the pupils, pain in the arm and subsequently in the legs, some erythema about the puncture, but by no rise of temperature. On the third day the symptoms had all disappeared. A second inoculation was performed with 0.05 centigram (*sic*) of the sterilized urine in 0.50 centigram of diluted spirits, the thigh being selected for the seat of puncture. This was followed by a marked rigor, pain in the head and limbs, fever, thirst, and delirium, with jaundice of the skin and conjunctivæ and albuminuria. In three days all had passed off."

This was certainly a beautiful example of faith in the masters on the part of the young physician, or a more than commendable willingness to put life in jeopardy for the glory of science and the good of mankind; but only time and many like tests can give the theory any definite value.

If, however, experiment shall prove the correctness of the conclusion of these gentlemen, it will be allowed by all that they have made the greatest hygienic discovery of the ages, since, if the theory holds good with yellow fever, it is probably true of all other zymotic diseases. Now that the chemist can easily isolate the animal alkaloids from the urine, they may be presented to the physician in a chemically pure form, who will thus find the prevention of typhoid fever, measles, scarlet fever, malaria, *id omne genus*, reduced to the trifling

matter of a hypodermic injection of the alkaloid produced by the microbe of the disease in question.

This is truly a hygienic Utopia; but before we set sail for this region we shall wait for a ship or two from thence to come in. It might be suggested here that if the hypothesis of these South American doctors be true, it will settle the hitherto much mooted point of the part played by these animal alkaloids in the production of disease.

MR. TAULBEE'S CASE.

"I am nothing if not critical," returned Iago when Desdemona asked him what he would say if called upon to write her praise. Iago might, with much justice, have made this brief description of himself to apply to physicians in general; for while doctors in the main are something more than critical, they are too much given to criticising the practice of one another. This disposition has within a week been made very manifest in the case of the late Mr. Taulbee.

It was equally so when President Garfield received the wound from which he died, and yet the unfortunate President had as professional servants some of the most eminent and most trusted surgeons in America. This fact seemed, however, in nowise to deter physicians all over the country from expressing unfriendly criticism on the general management of the case—from censuring the practice of his attendants. Most of these critics sought the secular press as the channel in which to air their opinions. We are willing to allow that all these fault-finders were honest and believed just what they said. But were any of them in a situation to form so correct an opinion of the condition of the wounded man as were Prof. Agnew and his associates in the case? Few of them had ever seen General Garfield when in health. Not one of them had laid eyes on him after he was shot. Their only means of information was the newspapers, whose reports on all the nicer points of both diagnosis, prognosis, and treatment are notoriously opinions rather than facts.

The facts, so far as obtainable from the pres-

ent sources of information, are that Mr. Taulbee received a bullet wound which was sufficient in itself to cause his death, whether the ball had or had not been probed for, located, or extracted by his surgeons. It was not the continued presence of the ball that caused Mr. Taulbee's death. It was the abscess and associated inflammatory processes which did the business. And they were the result of the fracture of the base of the skull and the injury done to the cranial contents. Had the bullet not produced a comminuted fracture of the base and thus lacerated or punctured the membranes of the brain, neither inflammation nor abscess would have followed and the patient would have recovered. Had the projectile been found and removed on the spot, the injury to the floor of the cranium and all its dire consequences would have been just the same. The abscess was caused by the fracture. Death was caused by the abscess. There is not sufficient ground for believing that the continued presence of the bullet in any degree augmented the cerebral injury, and it was this alone which made the wound necessarily fatal. To say, as some doctors have been reported by the newspapers as saying, that Mr. Taulbee's death was either directly or indirectly due to the neglect, ignorance, or meddlesome interference of his medical attendants, who are justly regarded as entirely competent men, may be a cheap way of gaining notoriety, but it is criticism at long range, which their regard for the code and their sense of right would not suffer them to make at short range, with reference to the management of any similar case by any local physician in their own town or village.

Notes and Queries.

OBITUARY.—Dr. Robert B. Pusey died at his residence in Elizabethtown, Ky., on the 7th day of September, 1889, of typhoid fever.

He was born in Meade County, Kentucky, near Garnettsville, August 24, 1836. He acquired his education principally at Brandenburg Academy, controlled by Prof. D. C. Culley, a very prominent educator; studied medicine with his brother, Dr. H. K. Pusey at Garnettsville, and attended lect-

ures and graduated at the Jefferson Medical College, Philadelphia, in 1859, immediately thereafter locating in Elizabethtown, where he continued to practice to the time of his last illness.

In 1864 he married Miss Belle Brown, daughter of Alfred M. Brown, a prominent attorney at law of Elizabethtown.

Dr. Pusey possessed many eminent traits of character, which it would be well for his successors in the profession to imitate. He was very energetic, and never refused to answer a call on account of the poverty of the patient, if able to ride. In fact it was said of him that he went many times when really he should have been in bed. This characteristic may be said to be the cause of his untimely death. He was virtually worked down, and should be awarded the credit of having fallen in harness.

He was possessed of quite an extensive and lucrative practice, being many times called in consultation at a distance. He was for a long time the principal surgeon of this Elizabethtown and vicinity. He was unusually kind to his patients, and commanded their respect in an eminent degree. He will be greatly missed by his *clientèle*, especially the indigent class, to whom he was always so kind and attentive.

Dr. P. belonged to a family noted for energy, industry, and thrift. His father moved to Kentucky from Maryland in his younger days, when the former State was but sparsely settled. He was a pushing, thrifty farmer, and left six sons, three of whom studied medicine, to wit: Henry K., David, and the deceased. They all succeeded in an eminent degree in their profession, the elder, Dr. H. K., having filled the position of superintendent of the Central Asylum for the Insane at Anchorage with ability and distinction. It may be said the deceased belonged to a family of many doctors, there being some seven or eight, including brothers, nephews, and sons.

Dr. P. left a widow and two sons, Dr. William A. and Brown. The eldest, Dr. William, has taken the place of his father in the practice, occupying the same office.

His second son, Brown, is studying medicine with his brother, and is taking his first course of lectures.

The deceased left a competency for his family.

T. B. G.

AMERICAN DIPLOMAS ABROAD. — Three newspaper items have fallen together on the editorial desk. They seem to mutually illustrate each other. The following telegram was published not long ago in one, at least, of the daily papers:

"The two hundred American physicians matriculated at the University of Berlin are greatly agitated over the refusal of the German authorities to recognize their American diplomas in the recently issued University calendar. While the medical degrees of all other nations are duly recorded, those conferred by institutions in the United States are entirely ignored. In explanation of the omission a high official attached to the ministry of education to-day said: 'Your American colleges don't come up to our German standards, by any means, and are too various and miscellaneous in their character to claim recognition.' American physicians here are never addressed by their title, nor are their letters so inscribed, although there are in Berlin graduates of several of the leading American medical colleges." The telegram then goes on to say that "it is proposed by the ignored medicos to prepare a memorial to the authorities expressive of their astonishment and indignation at the treatment received."

Perhaps no more emphatic declaration could be given of the status of American diplomas than is found in this reported action of the German authorities. It is not right to include all American medical degrees in such a sweeping denunciation, but that there are reasons which may be urged in extenuation of such a course will be abundantly seen.

The second item started from the Buffalo Advertiser, and, greatly abbreviated, reads as follows:

"Some publicity has recently been given to the fact that a society incorporated in 1886, entitled the 'Druidic Banchoreion of New York State' exists in this city. . . . That cer-

tificates are granted to members or others who pay the necessary fees, which purport to give the holder thereof a certain status in the society. . . . It is the opinion of regular practitioners of medicine who hold legal diplomas in duly authorized medical colleges that this Druidic Institute is a fraud in fact, though it holds itself under the pale of the law by giving certificates that mean nothing to people of education, but to the ignorant would pass for regular medical diplomas. Also, being issued to outside parties, or in foreign States, would pass for diplomas of high degree."

The existence of such fraudulent institutions among us has long been known, but only of late has their number and the wide circulation of their worthless diplomas been comprehended. It is hardly strange that a government that paternally cares for the education of its physicians should look askance upon diplomas that issue from a country where "Druidic Banchoreions" have the same, or apparently the same, official sanction as more regular associations for instruction in medical art.

But the great difficulty with American diplomas is illustrated in the third extract, which is from a Baltimore paper, and is headed, in the sensational style of the daily press, "Make Better Doctors." The article sets forth that "the faculties of the medical colleges of Baltimore have decided to make a determined effort to raise the standard of medical education in Baltimore, and to extend their efforts by a concerted movement to all parts of the United States." Six different faculties from that city alone are represented in this movement. They have decided to send to all the colleges of the Union a call to a National Conference, to be held at Nashville coincidently with the meeting of the American Medical Association next May. The course proposed by the Baltimore conference promises to be much more effective than the memorial of the young doctors studying at Berlin.

But while every credit should be given to the Baltimore schools for initiating a movement to raise the standard by national co-operation, it emphasizes the curious condition of American medical education to find six institutions with the power of conferring medical

degrees in one city of the size of Baltimore. That the standard proposed as a minimum is not inordinately high may be seen by reference to the topics proposed for discussion in the call on another page of the Journal.

Perhaps this ruling of the German university will bear fruit by showing young men that a diploma gained in the shortest time, and with the least possible outlay of money, can not be considered as representing a high degree of knowledge on the part of its possessor.—*Boston Med. and Surg. Journal*.

ABUSE OF MASSAGE FOR WOMEN.—In the Medical Record, February 22, 1890, an anonymous correspondent writes: A woman wants to protest against the importance attached to the congestion of the mammary gland by Dr. Fowler in a recent issue of your paper. Of course a woman has congested milk-glands, and of course she has a congested uterus and ovaries at times, and of course these several congestions can be relieved by menstruation, for instance, and in other ways. To assume that orgasm will dissipate these congestions, there is surely nothing new about that. To artificially induce orgasm for their relief is, however, playing with fire. Can you imagine that the cure will be permanent in the case of any of the hysterical girls to whom the doctor has referred? And if not, what then? Must the doctor be called in again and again for the relief of the mysterious symptoms? And must the girl degenerate into that most despicable creature—the woman who can not live without her physician? A sentiment of respect, even in Dr. Fowler's mind, must follow the girl who would not have her "lump" treated.

So long as pelvic massage was confined to cases of pathological alterations in structure and function, we listened in patience; but when it comes to be applied for the relief of a physiological congestion, and applied to innocent, ignorant young girls, it is time to call for a halt. The practice then assumes a plane not perceptibly different from that of the *masseuse* who cures nervous disorders in men by similar means.

If you ask me what do women do with these cases, I would tell you that we first explain to

the girl herself the character of her ailment. We disabuse her mind of the idea that there is any thing wrong or immoral about the condition, but tell her that, on the contrary, it is a normal expression of her womanhood. We tell her further that it is a temporary condition; that, at the worst, it will pass over in a little time, and we tell her of various means by which it may be dissipated or avoided. One of these is physical exercise. An exhaustive gymnastic course might be prescribed. The Swedish movements for the relief of pelvic congestion are worth some study in this connection. Mental work is another great prophylactic against undue sexual irritability. Let her enter some competitive examination, take the lectures at the Barnard, or some special course of instruction. Cheerful companionship should be in all this insisted upon. Among working girls persistent eroticism is so rare as to almost invariably indicate an unsound mind, which is, of course, the ordinary tendency of these cases.

The question of women physicians in asylums follows this same line of argument. The demented woman is highly erotic as a rule. To supply women for her immediate attendants is simply to diminish the disturbing influences likely to increase her mental instability. The necessity is not for a woman's attentions for gynecological treatment alone, but for all that presupposes close proximity in these cases.

INTERNATIONAL MEDICAL AND SCIENTIFIC EXHIBITION.—In connection with the Tenth International Medical Congress, to be held in Berlin between the 4th and 10th of August, there is to be an International Medical and Scientific Exhibition. The exhibits will be of an exclusively scientific nature, as follows:

New or improved scientific instruments and apparatuses for biological and strictly medical purposes, inclusive of apparatuses for photography and spectral analysis as far as applicable to medicine.

New objects and preparations in pharmacological chemistry and pharmacy.

New foods.

New or improved instruments subservient to any of the departments of medicine, including electro-therapy.

New plans and models for hospitals, convalescent homes, and disinfecting and bathing institutions and apparatuses.

New arrangements for nursing, including transportation, baths, etc.

New apparatuses in hygiene.

Applications or inquiries inscribed "Ausstellungs-Angelegenheit," and accompanied with a printed card containing the name and address of the firm thus applying, ought to be directed to the Secretary General, Dr. O. Lassar, Carlstrasse, No. 19, Berlin, N. W., Germany.

R. Virchow, President; E. von Bergmann, E. Leyden, W. Waldeyer, Vice-Presidents; O. Lassar, Secretary General.

RECENT SAVING OF LIFE IN MICHIGAN.—In a carefully prepared paper, read about the Sanitary Convention at Vicksburg, the proceedings of which are just published, Dr. Baker gave official statistics and evidence which he summarized as follows:

"The record of the great saving of human life and health in Michigan in recent years is one to which, it seems to me, the State and local boards of health in Michigan can justly 'point with pride.' It is a record of the saving of over one hundred lives per year from small-pox, four hundred lives per year saved from death by scarlet fever, and nearly six hundred lives per year saved from death by diphtheria—an aggregate of eleven hundred lives per year, or three lives per day, saved from these three diseases! This is a record which we ask to have examined, and which we are willing to have compared with that of the man who 'made two blades of grass grow where only one grew before.'"

AN ARMY MEDICAL BOARD will be in session in New York City, N. Y., from May 1 to 31, 1890, for the examination of candidates for appointment in the Medical Corps of the United States Army, to fill existing vacancies.

Persons desiring to present themselves for examination by the Board will make application for the necessary invitation to the Secretary of War, before April 1, 1890, stating the

place of birth, place and State of permanent residence, and inclosing certificates based on personal knowledge from at least two physicians of repute, as to professional standing, American citizenship, character, and moral habits; also, statement of service in hospital from the authorities thereof is desirable. The candidate must be between twenty-one and twenty-eight years of age, and a graduate from a regular medical college, as evidence of which his diploma must be submitted to the Board.

Further information regarding the examinations and their nature may be obtained by addressing the Surgeon General, U. S. Army, John Moore, Washington, D. C.

DURING the late influenza epidemic in Edinburgh the lay press, as elsewhere, published with avidity any thing bearing on the subject: "Interviews with Leading Medical Men" occupied much space. Somebody succeeded in "stuffing" the Evening Despatch with the following information, which was gravely published:

"There are a good many complicated cases occurring, such as intercostal neuralgias and severe head pains, but the most serious of those are where the throat symptoms are associated with, in the male, salpingitis, which necessitates either tracheotomy or hysterectomy. If hypospadias occurs, it may be well to give iron in large doses, but if a rupture of a Graafian follicle supervenes, it may be serious, or even fatal. This last complication is believed to be due to an organism not belonging to the bacteria, but like them not containing chlorophyll."

JUSTICE TO THE DOCTOR.—Dr. Henry Palmer, of Janesville, Wis., has been awarded \$100 damages against Miss Alice A. Broder, of Beloit, in his damage suit for \$10,000 for malicious prosecution. The jury deliberated for twenty-four hours before reaching a verdict. About four years ago a brother of Miss Broder, who lived with her two sisters at Beloit, was found dead on a flight of stairs leading to his law office. Suspicion of foul play having arisen, a medical examination was held, Dr. Palmer assisting thereat. Nothing was found

to justify the opinion that murder had been committed, and the remains were buried. A few months ago Miss Alice Broder received an anonymous letter saying that Dr. Palmer had in his possession bones taken from the body of her brother. The three sisters had the remains exhumed, and found that some of the bones of the head were missing. The Misses Broder at once caused the arrest of Dr. Palmer, who, however, showed at the trial which followed, that these portions of the anatomy had been removed in the course of the medical examination. He was acquitted, and immediately instituted the proceedings which have just been concluded.

EVERY MAN WITH HIS OWN DISPENSARY. In a recent article in these columns upon the dispensary abuse, we suggested that each man might have a dispensary of his own if he were so disposed, giving a part of certain days or of each day to the poor. We are glad to learn that this suggestion has already been acted upon by one gentleman at least, and we hope that he is only the pioneer in a reform that will undoubtedly benefit in no small degree the younger practitioners in this city or in any city in which the custom may be adopted. This gentleman has had cards printed after the model of the regular dispensary card, stating that he will give free consultations to the poor from 9 to 10 o'clock every morning. The card also contains the announcement that a certain druggist in the neighborhood will put up prescriptions at half price.

The doctor has been accused by some of his brethren with unprofessional conduct in publishing the fact that he will treat the deserving poor gratuitously, but we must confess that we fail to see wherein the unprofessional conduct lies. It would have been better, we think, had the apothecary's name not appeared upon the doctor's dispensary card, but that is perhaps a matter of taste rather than of principle. As for printing and distributing the cards, there is no crime in that, or if there is, there are many criminals in this good city of New York. The dispensaries distribute cards with the names of the attending physician upon them, and some of them did not long ago, and may now, for

all we have heard to the contrary, advertise in the daily papers, giving not only the names of the attending physicians but also their addresses. If a corporation of physicians can publicly advertise, why should a private individual be debarred from letting it be known quietly that he is ready to run an opposition to the corporations in caring for God's poor. His right to give his services can certainly not be questioned, and it is our opinion that there is nothing unprofessional in systematizing his charitable work by appointing stated hours and by giving cards to his free patients. His dispensary has as much right to exist as any other, and methods that are legitimate for a public dispensary are also proper for a private one.

The dispensary evil is a real one, it is taking the means of a livelihood away from many deserving young men, it is growing constantly, and it must be combated to be kept within proper bounds. The remedy that we have suggested seems to us to be the only effectual one. We congratulate our friend who has had the courage to oppose the evil by starting a dispensary of his own, and we should be glad to see the example that he has set followed by other physicians throughout this city. An attempt was made some time ago to organize concerted opposition to the dispensary abuse, but for some reason the movement never came to anything, and there is nothing left but for each individual to act for himself.—*N. Y. Med. Record.*

THE MONAD OF INFLUENZA.—Professor Klebs, of Zurich (*Centralbl. f. Bakter.*, vii, No. 5, *The Lancet*), gives the results of his examination of the blood in cases of influenza. He finds a large number of highly refractile, mobile bodies, in size, form, and mobility resembling bodies which he has met with in pernicious anemia, but in far less quantity. Moreover, no microcytes, such as occur in the latter disease, were to be seen. In a fatal case of influenza some blood was removed from the heart, with every precaution to avoid contamination, and the "monads" were detected therein; they varied somewhat in size, being oval in shape, and not only had vibratory movement, but were also capable of locomotion.

They were often attached to the margin or embedded in the substance of the blood corpuscles. The organisms were distinctly flagellated, and in stained preparations their intimate connection with the corpuscles could be plainly shown. Provisionally, Professor Klebs would assign them a place among the Rhizomastigma of the Monadineæ, according to Bütschli's classification of these protozoal forms. The professor remarks that in other diseases in which similar hematozoa have been discovered, as ague and pernicious anemia, there is a tendency to intermittency in the type of fever; and since influenza shows a like tendency—commonly styled relapse—he thinks it quite possible that such "relapse" is associated with stages in the development of the micro-organism.—*Medical Record.*

A DOCTOR SUES A DRUGGIST.—Dr. Samuel J. Leggett, a Philadelphia physician, wrote the following prescription: "Potass. bromide, two drams; tincture aconite root, twelve drops; sweet spirits of niter, two drams; sulphate of morphia, one and a half grain; peppermint water, half-ounce; simple syrup sufficient to make three ounces." Of this the patient was directed to take two teaspoonfuls every two hours in water. This was handed to the druggist by the patient, but the druggist refused to put it up, saying that it would poison her by forming an insoluble hydrobromate. Dr. Leggett brings suit for \$20,000 against the druggist for injury to character and reputation, asserting that the prescription was a proper one.—*Medical Record.*

[If we were sure there was no danger of more suits for damages, we would give our opinion of both physician and druggist.—*Eds.*]

THE DEFINITION OF A HOMEOPATH.—The Medical Board of Ward's Island Hospital have adopted the following resolution: *Resolved*, That in the opinion of this board the only requirement as to belief and practice of a physician should be as follows: That, in common with other existing associations

which have for their object investigations and other labors which may contribute to the promotion of medical science, we hereby declare that we firmly believe the principle *similia similibus curantur* to contribute the best general guide in the selection of remedies, and that we fully intend to carry out this principle to the best of our ability; yet this belief should not deter us from recognizing and making use of the results of any experience, and we shall exercise and defend the inviolable right of every educated physician to make use of any established principle in medical science or any therapeutic fact founded on experiments and verified by experience, so far as in his individual judgment they shall tend to promote the welfare of those under his professional care."—*Medical Record*.

ANECDOTE OF SIR WILLIAM GULL.—A correspondent of the London Times relates the following anecdote, which shows that Sir William Gull possessed a kindness of heart only rarely met with in this money getting age: "Some years ago a gentleman, whose failing health was coincident with failing fortune, consulted Gull. For a while the remedies were of use, but one day the patient presented himself looking so much worse that Sir William had to seek for a special cause. The explanation was adequate: 'I have been obliged to call my creditors together;' whereupon the great physician wrote a check for all past fees—about thirty guineas—and, putting it into his patient's hands with the other prescription, said simply: 'Perhaps that will help you more than the medicine to-day; but pray take them both.'"

DIPHTHERIA CONVEYED BY CATS.—Two writers in the Medical Age (1889, No. 7) have reported cases of diphtheria propagated from or carried by these domestic animals.

Dr. Lawrence reports two cases. Upon careful inquiry it was found that the first case had not been exposed to the disease, although there were some cases within a mile of her father's house. He incidentally learned that

there was a sick cat in the house, which had been fondled by the little girl some days before. The cat died shortly after its playmate became sick, and a second cat also became sick and was killed. An investigation revealed the fact that one neighbor farmer lost seventeen cats, and another fifteen, with some throat trouble. One of the farmers stated that he had examined the throats of some of the cats, and found them covered with a white membrane. Cats are disposed to run from house to house, and one diseased cat may be the means of carrying diphtheria to many children whom the parents are taking every means to protect from danger.

Dr. Scott reports four most malignant cases occurring in one family. A kitten came to the house a few days before the disease manifested itself, and was fondled by the children. Through accident the mother discovered the mouth and throat of the feline were infested with false membrane, and therefore caused it to be killed; but too late to save herself and three little girls from infection.

SEARCHING A MEDICAL COLLEGE FOR ANATOMICAL MATERIAL.—The Tennessee Medical College has lately been subjected to several searches by officers armed with search-warrants for the discovery of bodies alleged to be under dissection. Becoming tired of the annoyance, the college has applied for an injunction against the justices issuing any more search warrants, on the ground, among others, that such warrants would not apply to dead bodies as "property." The college purposes to see if the private apartments of the institution are to be thrown open to the curious gaze of the indiscriminate public.—*Boston Medical and Surgical Journal*.

NAPLES AND TUBERCULOSIS A CENTURY AGO.—At a recent meeting of the Paris Académie de Médecine, says the New York Medical Journal, M. Sée read the following decree, issued a hundred years ago by the King of Naples: "Every physician is henceforth required to report to the authorities every case of consumption the instant it is recognized.

Failing this, a fine of four hundred ducats will be exacted; and for a second offense banishment for ten years. Poor patients shall at once be taken to the hospital. Their clothing and linen shall be kept and cared for apart from those of other patients, and an inventory be made. In case of death, every article must be produced and identified by the hospital superintendent. Any infringement of this rule may be punished by imprisonment or the galleys. It is the duty of those in authority to renovate the room of a former patient—floor, hangings, and furniture coverings—to burn the window-frames and doors and replace them by new ones. The extreme penalty of the law will be visited on any one buying or selling the effects of phthisical patients. Every house where a consumptive dies shall be blacklisted." The decree was enforced up to the year 1848, but, according to M. de Renzi, proved no impediment whatever to the prevalence of tuberculosis.—*Ibid.*

THE PROGRESS OF CREMATION IN ENGLAND. The Medical Press and Circular (January 27, 1890) states that there are everywhere in England signs that public sentiment against cremation is diminishing in that country. Among other things in this regard it may be noted that the Manchester Cremation Society has just accepted the offer of one of its members, a civil engineer, to visit at his own expense and report upon to the Council the whole of the more important crematoria on the Continent. Such report should be not only interesting, but highly useful. It would seem that the furnaces in use are not of the most satisfactory description, and that there is still room for improvement in this regard. This is a subject to which engineers may well give their studied attention.—*Medical and Surgical Reporter.*

THE EPIDEMIC OF GRIPPE OR INFLUENZA. The German and Prussian Ministries have ordered a thorough inquiry into the recent epidemic. The investigations instituted by the Berlin physicians promise great success, as they are being carried on upon a very extensive scale, and are, in fact, of an inter-

national character. In Italy the epidemic, though mild in form, is spreading rapidly, and the Communal Council of Rome has made a grant of 50,000 francs for preparing a lazaretto in some unoccupied school buildings, owing to the fact that the hospitals are now crowded. There are a good many cases at Alexandria, and though the malady is of a mild form, it seems to have affected the death-rate, which, in Cairo is 56 and in Alexandria 48 per 1,000, as against 43 and 41 respectively in January last year. The rise is mainly due to diseases of the respiratory organs. Intelligence from Mexico reports that the malady is increasing in that country. In some cases it is followed by pleurisy, and many deaths are attributed to it.—*London Med. Recorder.*

A CURIOUS MENTAL TRAIT.—A correspondent of the German Anthropological Society tells of his meeting a farmer, by the name of Löwendorf, who had a peculiar habit of writing "August" for "August," his Christian name. Some years later he was inspecting a school, and heard a little girl read "leneb," for "leben," "nadel" for "nadel," and the like. Upon inquiring, he found that her name was Löwendorf, and that she was the daughter of his former friend the farmer, now dead. This defect was noticeable in the speech and writing of both father and daughter. It appeared in the father as the result of a fall that occurred some time before the birth of his daughter.—*Science.*

THE NEW YORK DISPENSARY, which is the oldest institution of the kind in the city, and probably in the country, has just issued its centennial report. It was founded in 1790, and is not only the oldest but the largest dispensary in New York. In presenting this report of its increasing work for a hundred years, the Board of Trustees call special attention to the territory in which its ministrations are carried on, which includes within its borders the poorest part of the city, where the assistance which such an institution can give is most constantly in demand; and also state

that, notwithstanding the size of this territory (larger than that of any other dispensary in the city) and the number of its regular patients, medical and surgical aid is also given to the deserving poor of other parts of the city. In the hundred years of its existence, the medical staff has treated an aggregate of 2,142,999 patients, and at the present time as many as 500 cases are treated in a single day. During the year just closed there were 44,331 new cases, a larger number than in any preceeding year.

DR. JUKES DE STYRAP, a prominent member of the British Medical Association, has just published, through H. K. Lewis, London, a manual of practical and instructive suggestions for doctors beginning practice, under the title, "The Young Practitioner." The book is modeled after and largely made up of extracts from "The Physician Himself," by Dr. D. W. Cathell, of this city, so well known to many of our readers. The English author acknowledges his obligations to his American *confrère* in a neat and cordial dedication. This graceful though just act is so different from the ordinary European custom in relation to things of American origin, that it deserves honorable mention.—*Maryland Medical Journal*.

THE German Medical Congress, which meets this year in Vienna, is fixed for the 15th to the 18th of April. The Congress registers upward of 300 members, and has its fixed habit at in Wiesbaden, but in the month of November last this *Congress für innere Medizin* selected Professor Nothnagel as the president for 1890, who, when accepting the honorable office, requested the members to assemble in Vienna.

THE influenza epidemic is on the wane in Italy. In a mild form it still prevails in the southern towns, but in the central and northern parts of the peninsula it has sunk to merely sporadic proportions. In Florence, indeed, where it appeared in greatest force, the lazaretto specially opened for it is now closed for want of inmates.

A MEDICAL ASSOCIATION IN CHILI.—Steps are being taken to organize a Medical Association in Chili. It is intended to include all the medical practitioners in the country. The object of the association is "to give help to all members of the profession or to their families as often as they are in need of it." It has also been decided to form a Medical Association in Cuba.

THE New York State Medical Society, at the annual meeting at Albany, elected the following officers: President, Dr. William Warren Potter, Buffalo; Vice-President, Dr. L. S. Pitcher, Brooklyn; Secretary, Dr. Frederick C. Curtis, Albany; Treasurer, Dr. C. H. Porter, Albany.

MRS. SALLY WEEKS BUCKNAM died, February 21st, at Lancaster, New Hampshire, aged one hundred years and six months. She was the oldest person in Coos County, and always enjoyed good health, retaining her mental faculties until within a few months of her death.

IN view of the spread of venereal disease in Italy since the repeal of the regulations formerly in force, the Minister of the Interior has appointed a commission to investigate the subject and suggest measures for the repression of prostitution and syphilis.

NINE cases of typhus fever have occurred in New York City since December 24, 1889. All but two received the contagium of the disease abroad. Two developed it from contagium received from infected material brought to that city from Antwerp.

THE physicians of the State of Virginia are annually taxed from \$30,000 to \$35,000 for the privilege of pursuing their daily avocations. The tax is in the form of an annual license fee.

GEHEIMRATH PROFESSOR OTTO BECKER, a distinguished German ophthalmologist, died at Heidelberg, February 7, 1890, at the age of sixty-one years.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., MARCH 29, 1890.

No. 7.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

ON THE TREATMENT OF CYSTITIS IN THE MALE.*

BY DAVID W. YANDELL, M. D.

Acute cystitis, chronic cystitis, and vesical catarrh, so called, are the three forms of disease under notice. While acute cystitis is seen in two very distinct forms, the one traumatic, the other the ordinary affection, I shall speak only of the latter.

The treatment of this condition may be said to rest on what Keyes calls the tripod, attitude, alkalies, anodynes, which words mean rest in bed with elevation of the pelvis, alkaline diluents, and anodynes to the point of relieving pain and tene-mus. The force of these agents will be assisted by gentle counter-irritation over the hypogastric region, with heat there and to the perineum, mild laxatives, demulcents, diuretics, certain infusions and decoctions, and full hot baths. In gonorrheal cystitis a better remedy perhaps than all these, one which acts more quickly and with greater certainty, is a solution of nitrate of silver carried every few days, till relief is obtained, to the membranous urethra with a suitable syringe. The strength of the solution varies in different hands from one grain to twenty grains to the ounce of water. I prefer a strength of ten grains to the ounce. Gonorrhea being the exciting cause in most instances of acute cystitis, I have found it best, especially in the early stages of the affection, to suspend all the usual

specific remedies in such cases, notably cubebs, oil of sandal wood, and copaiba. I do not deny having at times seen good results follow full doses of copaiba, taken even when the disease is at its height, but I think the balsam an uncertain remedy, and am not able to say in advance when it will work for good. I think fluid extract of pichi a more reliable and equally efficient drug just here, but it must be given in large and often repeated doses.

Diet is of great importance, salt meats, condiments, black coffee, cheese, and acidulated drinks, unless made effervescing with the carbonates, should be forbidden.

The rectum should be studiously kept empty. In bad cases large enemata of warm water frequently thrown into the gut are an exceeding comfort. Opium is usually necessary, and in whatever form given it should preferably be lodged in the rectum.

Keyes' three A's, the general hot bath, an empty rectum, opium, pichi, and a few drops of a ten-grain solution of the nitrate of silver carried to the deep urethra, embrace the most trustworthy means for the relief of this form of cystitis.

In the subacute stage of the affection pichi has appeared to me to be especially useful, and its efficiency much increased by the liberal use—say not less than three pints daily—of the Waukesha waters, at the head of which I place the Silurian. This is ordinarily given in its natural state, though sometimes it has seemed to be better borne and proved more useful when charged with carbonic-acid gas. When a case persists in spite of the foregoing, I have seen great improvement follow large and repeated doses of pure Venice turpentine rubbed into pill with magnesia.

Chronic cystitis is also observed in two distinct forms. In the simpler there is little

*A summary of a paper read before the Louisville Surgical Society, March, 1890. For discussion see page 200.

else than a slight increase of the natural mucus of the bladder mixed with the urine. Here the inflamed mucous membrane, naturally more sensitive, becomes quickly intolerant of the presence of water and drives the bladder to expel it at frequent intervals. The tripod of Keyes, followed out to the letter during the acute exacerbations, supplemented by pichi and Silurian water, will fetch about in the large majority of cases quick and marked improvement, and in time permanent cure.

It is the second variety of chronic cystitis, called, as I think improperly, vesical catarrh, which is the most frequent of all the bladder troubles.

Sir Henry Thompson stated, now a long while back, that cystitis has almost always some ascertainable cause, and that it very rarely indeed appears in what is called an idiopathic form. Keyes goes so far as to say that it never appears as an idiopathic affection, but is always a secondary result arising from other morbid conditions of the urinary passages. And he adds, that once started it does not tend to get well spontaneously, but to become steadily worse. Most of the several causes of this condition can be removed, and with them the chronic inflammation which they keep up. Necessarily some cases are incurable because of permanent structural changes in the bladder walls, or where the cause can not be reached. All, however, may be benefited by careful and judicious management.

In no disease is the command to remove the cause more imperative than in chronic cystitis. It goes without saying that in many cases this can not be done. Where it can be accomplished chronic cystitis is among the most curable diseases at any period of life, unless it has continued for such a length of time as to produce structural and permanent change in the bladder walls (hypertrophy, sacculation, etc.). Palliative treatment is reserved for these latter cases; and it is in just these cases that our art is capable of doing so much to comfort and assuage, to make life bearable and to lengthen its span. And when results here are not all that may be desired we have left the operation for supra pubic fistula. This procedure is unfortunately often too long delayed. It were bet-

ter, I hold, to do this early than late, and I venture to think that the improvement in the management of obstinate cases of vesical catarrh, which the near future will emphasize, lies in early cystotomy.

In vesical catarrh due to causes which can not be overcome, the first thing to do is to empty the bladder by a catheter once or more a day, with the gentlest possible hand. Where this can be thoroughly done the most important advance toward relief has been made. It unfortunately happens, however, that the contents of every bladder can not be completely removed with the catheter. For causes which I shall not stop to enumerate, a portion of the urine remains; this and the mucus undergo chemical change, decompose, become stale, acrid, irritating, and intensify by their presence the already existing evils.

In this condition of things it becomes necessary to supplement catheterism by washing out the bladder. How often should the patient be catheterized? The best answer, I think, is furnished by the bladder itself. Whenever this organ becomes sufficiently distended to produce pain, empty it. If the patient can do this unaided, so much the better; but be sure the evacuation is complete, otherwise employ the catheter yourself, for the urethra had better be subjected to the irritation of an instrument than the bladder subjected to the irritation of residual urine. Soft instruments are better than hard. Water containing a small quantity of salt or of chlorate of potash is a more agreeable injection to the patient than simple water. But equally agreeable, and of positive curative value, are injections containing boracic acid. Whatever be the injection, its temperature when it reaches the bladder should be not less than 100° F. Allowance should be made for the water to cool as it passes through the instruments, and it had better, therefore, be started from the vessel at a temperature of 105° to 110°. The ordinary Fountain syringe is as good an instrument as any for making injections. Few bladders will receive at first without pain more than an ounce or two of water. A sense of vesical uneasiness should be the guide as to the amount of water introduced. Positive

pain should not be inflicted. The water, after remaining in the bladder for a few moments, should be allowed to run out. It will bring with it at first whatever substance is mixed with the urine—always mucus—sometimes pus and mucus. The injection should be repeated until the water runs away clear. After a time there will either be an improvement in the bladder it-self, or it will have grown accustomed to injections, when larger quantities of water, and often of much higher temperature, may be introduced. Injections of gradually increasing size are, I think, indispensable to the cure of these cases. Without being used in this way they can not do their full work. The fluid must be made to reach every nook and corner of the pouches which are so often present in cases of long standing, and without the thorough cleansing of which no progress can be made toward cure, and not much even in the way of comfort.

Injections are medicated with many different substances. When the urine is alkaline and depositing phosphates, half a grain to a grain of acetate of lead to the ounce of water is strikingly valuable. A very soothing injection will be found in the bi-borate of soda, 15 grains dissolved in half an ounce each of glycerine and water. A few drops of dilute nitric acid to the ounce of water I have used with benefit where the urine was heavily charged with the phosphates. Nitrate of silver in even so small quantities as a quarter of a grain to the ounce, which is often recommended, I have found at times to cause great suffering. And though as much as 40 grains to the ounce of water have been thrown into the bladder, notably by my friend and former classmate, Prof. Richardson, of New Orleans, I have never ventured upon the introduction of so strong a solution except in a single case. In this the suffering was so very intense I have trusted since to remedies which were less severe.

As an all-round substance for injection I know none to compare to boric acid in every variety of cystitis in which injections are called for. It seems to me to fulfill every indication. It lessens the phosphates as well as lead or nitric acid. It changes the odor better

than carbolic acid, and when given in full doses internally at the same time it has appeared to me to accomplish all that can be done toward changing, correcting, and sweetening the urine. To get these results, however, the system must be saturated with it, and the bladder fully distended with it in saturated solution. Short of this it will be found necessary to supplement it by some one of its companions that I have named.

Among internal remedies the salicylates and the benzoates embrace perhaps the best. Tonics are useful in all, and essential in many cases. Warmth, as obtained by climate, by clothing, and by other means, is scarcely second in importance to any thing I have named. Many a man with chronic cystitis has been able to secure comfort by spending his winters in the South, and many cases have escaped exacerbations at home by avoiding all exposure to cold.

Catheterization done properly and sufficiently often, irrigation done properly and sufficiently often, with a saturated solution of boric acid introduced as hot as it can be borne, and gradually carried to the point of full distension of the bladder, constitutes, I think, the best local treatment for all the ordinary forms of vesical catarrh.

Bibliography: Sir Henry Thompson, Keyes, Bumstead, Berkely Hill.

LOUISVILLE.

LEPROSY.*

BY D. T. SMITH, M. D.

It may be safely said that no other disease that has fallen upon the human race has been attended with so much misery as leprosy. Consumption, smallpox, pneumonia, malaria and many other diseases that might be mentioned, have each slain thousands to its one, but such has been the dread of leprosy that those who suffered from it have been compelled to die a thousand deaths.

Syphilis is easily concealed, is communicated except in rare instances only to those who go half way to meet it. Smallpox spreads its contagion with such fated certainty that escape

*Read before the Louisville Medico-Chirurgical Society, August, 1889.

from it was deemed hopeless during all the ages when it was most destructive; while the plague, that bid fair at one time to depopulate the earth, was so quick in its deadly work that the human race stood dazed as the deer in the tiger's teeth, or the bird in the jaws of the serpent, and men scarcely realized that it was on them till death relieved them.

Consumption alone of all the diseases that make up the sad heritage of man could be made to yield so much of wretchedness and misery. If once the consumptive could be made the pariah that many who go wild on the question of microbes seem to desire; if forgetful of the fact that the bacillus tuberculosis is too widely and abundantly distributed for a suitable soil ever to remain unoccupied, even after all human efforts at disinfection have been exhausted, and forgetful that worse things than death can befall, then indeed might we see a worse state of things than Europe exhibited in time of the prevalence of leprosy during the middle ages.

During that period, when one was found to be afflicted with leprosy he was judged dead in the eyes of the law and putrid in the eyes of society, and even the church required the administration of extreme unction, while dirt was sprinkled over the head of the leper to typify the ceremony of burial.

To us the largest interest that attaches to leprosy concerns its diagnosis as a prerequisite to prophylaxis when once the disease threatens to invade the community. For, if it is contagious, as I have no doubt it is, then at some period when the medical constitution favors, it may spread rapidly and again become widely prevalent.

Leprosy has been well defined as an infectious parasitic disease of exceedingly chronic course, capable of involving all the organs and tissues of the body, characterized by cutaneous pigment alterations, disordered or abolished sensation, tubercles or other circumscribed or diffuse infiltrations, bullæ, ulcers, cicatrices, destruction of deep tissues, loss of appendages of the skin, and the ultimate production of a cachexia which usually terminates fatally. The definition fairly describes the disease. The history of a case of leprosy runs parallel with a

case of syphilis, only that an initial lesion is never known.

There is the same experience of *malaise* and fever with chilly sensations, but so slow is the development of the eruption, that in the large majority of cases these may be forgotten by the time the eruption becomes manifest; months and even years may elapse in some instances. The eruption may be of any shape and of any diameter, from that of a split pea to that of a walnut. The infiltration of the skin may go no further than a stain, such as might be made by the moderate bruising of the flesh, and will slowly go through such appearances as will such a bruise, the changes requiring months instead of days. This form is known as macular leprosy. Again, from these maculæ in a large majority of cases will arise, especially about the hands and face, tubercles corresponding in diameter and several lines in thickness. Sometimes they become bullæ, ultimately ulcers, though absorption may take place and the macular spot may remain as before. This form of leprosy is known as the tubercular. As in syphilis, there is constantly in these cases a new growth of irregularly shaped cells infiltrating the affected parts and producing the accompanying nodules. This new growth of cells commonly attacks the skin, in other cases, however, the nerves are the first to suffer. In cases where the granular infiltration first takes place in the nerves, there is, as might be expected, more decided anesthesia, and, what would not be expected, far less of drowsiness and hebetude. There is also in this form a greater amount of pain and a greater abundance of maculation than in the others.

The actual physical suffering in leprosy is not great, less even than in consumption, it being a mercy of the disease that all the sensibilities are lowered, and the *ego* contracted in all its relations. The diagnosis to the close and thoughtful observer ought not to be difficult. The pain, which has a distant resemblance to the lightning pains of locomotor ataxia, and the tingling and anesthesia when associated together are always suggestive. With the eruption added, no mistake should be made, especially when there occurs loss of color of the hairs in the affected spots.

Treatment is only palliative. It is now admitted on all hands that there is no specific, and that the most that can be done is to maintain the general health and sustain the powers of the system in their contest with the disease.

LOUISVILLE.

NOTE ON THE TRICHLORACETIC-ACID TEST FOR ALBUMEN IN URINE.

BY SIMON FLEXNER, PH. G., M. D.

In the Johns Hopkins Hospital Bulletin for February, 1890, Dr. D. Meredith Reese asks attention anew to trichloroacetic acid as a valuable test for albumen in urine. According to the above article, Boymond (*Repertoire de Pharmacie* for October, 1889) claims to have made first mention of the re-agent, and it has been adopted by Raahe. Dr. Reese quotes Boymond's original article, and says that "Marsalt and Languipin (*Archives de Pharmacie*, December, 1887) have described albuminous urine, in which urine the precipitate re-dissolved in acetic acid. Potein (*Comptes Rendus Acad. Sci., et Report. de Pharm.*, September, 1889) attributes this fact to the presence of a special albumen differing from serum albumen and globulin."

To further quote Dr. Reese, "Boymond has observed this phenomenon repeatedly, and considers that the condition is much less rare than supposed, and that the peculiarity has much import, for in a rapid examination of urine, when heat and acetic acid are used alone, we might perhaps conclude that albumen was absent when the urine might contain a considerable proportion of this special variety of albumen. He (Boymond) has been accustomed for some time to employ trichloroacetic acid instead of acetic acid. Other agents which precipitate albumen also precipitate this variety, but trichloroacetic acid presents some advantages, and particularly that of not changing the albumen. The re-agent precipitates albumen in cold solution, and is considered to rank among the most delicate tests. Raahe considers it extremely sensitive, superior to HNO_3 and to metaphosphoric acid. Raahe gives the

relative amount of albumen recognized by metaphosphoric acid, nitric acid, and trichloroacetic acid as in the proportion 1: 3.7: 6.2. He (Raahe) also states that .0295 gram of albumen can be recognized in 250 c.c. of urine." According to this, trichloroacetic acid has more than six times the delicacy of metaphosphoric acid and more than three and a half times that of nitric acid.

It is stated that it may be used in the crystalline form or in saturated solution. If used in the solid form, it is dropped into the specimen and a turbidity results if albumen is present. In the liquid form it is best used by superposition in the same way as Heller's nitric-acid test. The white ring which forms, in my experience at once, is characteristic and unobscured by the colored zone of oxidized pigments as in the nitric-acid test. It may be used for detecting all varieties of albumen.

The report from the Clinical Laboratory of the Johns Hopkins Hospital is as follows:

"In all, eighty-seven different urines have been tested, the urine filtered, and that from women drawn by catheter. At first only those urines showing albumen by control tests, such as heat, HNO_3 , and picric acid, were used, and in all cases trichloroacetic acid gives a distinct, clearly defined zone, produced immediately, with no discoloration whatever between the urine and acid. Generally the zone was produced more quickly than with nitric acid, and was of a greater thickness and intensity. On standing for some time, a slight pinkish discoloration may in some cases be obtained below the urine in the acid when trichloroacetic acid is used."

"In forty-three cases, where the control tests gave albumen, a precipitate was obtained by trichloroacetic acid, not dissolved but made more distinct by heat."

"In twenty-five cases no reaction whatever was obtained by any test. In fourteen cases, where there was no reaction by control tests, the trichloroacetic acid gave a precipitate. In eleven of these cases granular, epithelial, and hyaline casts were found, and

in three of these eleven cases the *post-mortem* showed distinct changes in the kidneys."

"In three cases, where heat and acetic acid and nitric acid gave no precipitate of albumen, a precipitate was obtained by picric and trichloroacetic acids. In all three of these cases casts were found. In two cases where the precipitate on heating was redissolved by acetic acid, trichloroacetic acid gave a good precipitate."

Since beginning the use of trichloroacetic acid ten specimens of urine have been examined. Of these seven give reaction for albumen, six with the trichloroacetic acid only, and one with nitric acid and heat as well as trichloroacetic acid. Of the six which gave the reaction with trichloroacetic acid only, five contained pus in small amounts, and two of these five contained hyaline casts besides. One of these contained, besides pus, oxalate of calcium, and in one of those containing pus and casts there was considerable uric acid and oxalate of calcium. The remaining specimen contained a large amount of oxalate of calcium, and is a case of oxaluria of long standing, in which albumen had previously not been found.

In conclusion, I can affirm that the test is sensitive and the reaction is distinct and conclusive.

LOUISVILLE.

CHEMICAL COMPOSITION OF SEVERAL SAMPLES OF MILK.

BY C. J. RADEMAKER, M. D.

Milk supplied to consumers living in towns is subject to adulteration. This is generally done by removing the cream and adding water, a fraud which is not easily detected. Milk is heavier than water, as it has a specific gravity of 1.032, consequently the fatty matter, which is lighter than water, can be removed and water added without altering the specific gravity. The simplest method of ascertaining the quality of milk consists in setting it aside for twenty-four hours in a lactometer, which is divided into 100 equal parts. The cream separates above and should range between 11 and 13 divisions. The cream may be rapidly

separated by means of a centrifugal separator, in which the tube containing the milk is placed in a case attached to a centrifugal apparatus, making 1,000 revolutions a minute. By this means all the cream can be separated in thirty minutes. But to estimate the solid constituents a chemical analysis must be resorted to. The following are the results of the analysis: Weight of milk taken 6.667 grms. This was evaporated in a weighed platinum dish, at a temperature of 212° to 220° F., until the weight remained constant. The total solids thus obtained were placed in a Soxhlet's displacement apparatus and the fat extracted with boiling ether, the ether allowed to evaporate at a low temperature, and the fat weighed. The residue from which the fat had been removed by ether was treated with boiling distilled water and set aside for the casein and insoluble salts to settle. The solution is then decanted from the precipitate. This solution is evaporated to dryness on a water bath to a constant weight, and then incinerated; the loss in weight being milk sugar and the ash soluble salts. The casein and insoluble salts were next dried and weighed. This was also incinerated—the loss in weight being casein and the ash insoluble salts. The fat was also estimated in milk by adding a little caustic soda solution and then extracting with ether, but no weighable difference was obtained in the result.

Petroleum naphtha may be substituted for the ether in extracting the fat from milk, with equally as good results. Besides the petroleum ether is much cheaper.

ANALYSES OF MILK.

SAMPLE No. 1: Specific gravity, 1.030; reaction alkaline.

Total solids in 100 parts dried, at 212° F.....	9.920
Water.....	90.080
Milk sugar.....	4.004
Butter.....	1.653
Soluble salts.....	.356
Casein.....	3.547
Insoluble salts.....	.360

SAMPLE No. 2: Specific gravity, 1.027; reaction neutral.

Total solids.....	6.683
Water.....	93.317
Butter.....	.320
Milk sugar.....	3.150
Soluble salts.....	.500
Casein.....	2.413
Insoluble salts.....	.300

SAMPLE No. 3: Specific gravity, 1.027; reaction neutral.

Total solids.....	5.900
Water	94.100
Butter600
Milk sugar.....	2.310
Soluble salts.....	.330
Casein	2.320
Insoluble salts.....	.340

SAMPLE No. 4: Specific gravity, 1.020; reaction alkaline

Total solids.....	5.000
Water	95.000
Butter200
Milk sugar.....	2.400
Soluble salts.....	.300
Casein	1.600
Insoluble salts.....	.500

The above is the maximum and minimum quantity of solids found in ten samples of milk analyzed. The amount of total solids should be at least 12 per cent; composed of 9 per cent of casein, sugar of milk, and salts, and 3 per cent of butter.

I have examined samples of milk that contained no butter, but it looked creamy, owing to coloring matter. This coloring matter upon examination was found to be turmeric. A qualitative examination also revealed the presence of bicarbonate of soda, boracic acid, and salicylic acid. These substances do not harm but are added for the purpose of preserving the milk. They were present only in very minute quantities. The above chemicals were found in separate samples of milk.

LOUISVILLE.

Societies.

LOUISVILLE SURGICAL SOCIETY.

Stated Meeting, March 10, 1890, Vice-President Dr. J. M. Mathews in the chair.

Dr. D. W. Yandell presented three specimens of ovarian cyst, one with the thinnest walls he had ever seen. The patient had violent peritonitis a long time before the operation. In order to avoid rupturing the sac he had to enlarge the opening. The cyst weighed twenty-two pounds. Another specimen had walls almost as thin. No previous rupture; weighed fourteen pounds. A third represented exogenous cyst of both ovaries, with a great number of cysts. This was widely adherent to the abdominal wall. The two cysts and contents weighed one hundred and one pounds. These cysts had been

growing for sixteen years. The cyst in the first case was eighteen months old, the second three years old. Free drainage was secured with all. In one the eyes of the ordinary tube were so large that the mesentery was sucked into the holes. In attempting to remove a tube in one case it stuck. A catheter was shoved through the tube and a piece of omentum three-fourths inch long was pushed out, tied, and cut off. The holes in these tubes are too large and not close enough together. No evil resulted in the case noted. This is the first time such an accident ever occurred in the practice of the speaker. He is partial to the drainage-tube. He is in the habit of emptying the tube as the patient is taken from the table. Then as long as he can get a dram or two of fluid he cleans it every hour, and never allows a tube to go longer than two hours without cleaning. The patient from whom the largest tumor came he is confident would never have gotten well without free tube drainage.

Dr. John G. Cecil presented remnants of the uterus, ovaries, and tubes removed because of cancer uteri. The patient was a negress twenty-nine years old. She had no clear history of causes. One or one and a half years ago she complained of convulsive seizures. Digital examination showed a portion of the cervix gone by sloughing. The vagina was not involved. The uterus was movable and not enlarged. She had had two or three children. There was no cachexia and no enlarged glands. The speaker expected difficulty, but decided upon an operation as offering the only chance for life. He was assisted by Drs. Anderson, Vance, and Cartledge. The operation was vaginal hysterectomy. He found difficulty in bringing the uterus down. New adhesions were brought to view as the operation progressed, in consequence of which the operation was very tedious. The adhesions fortunately did not involve the rectum. Finally he put on clamps and cut through the adhesions, and was able to bring away the womb, one ovary, and one tube. Four clamps were left on for forty-eight hours. The patient did not rally well from the operation. The pulse was small and irregular, and there was considerable nausea. Morphine given for relief

of pain perhaps tended to keep her in this state. Now, the fifth day after the operation, she is doing well. The rectum was button holed in removing a portion of the growth.

Dr. A. M. Cartledge said the adhesions destroyed all the landmarks of a vaginal hysterectomy. Every thing was so friable that the operator could not help opening the rectum.

Dr. Vance: Were not these adhesions perhaps benign? When one finds he can not freely separate the uterus from its surroundings he should get the bladder out of the way, invert and pull the body down, and so better clamp the vessels before removing the mass.

Dr. Yandell read the essay of the evening; subject, "Treatment of Cystitis." (See p. 193)

Dr. Palmer opened the discussion. After commending the paper he spoke favorably of pichi, saying that an aromatic elixir could be made of it that would overcome the objections that the essayist urged against its nauseant properties. In the matter of hot baths he spoke of the injection twice daily into the rectum of water at a temperature of 120° F. The presence of stricture of the urethra or stone in the bladder should always be carefully sought for. One remedy, the efficacy of which when given internally the speaker had discovered, and which he held to be the best, is boric acid internally administered in doses of from 10 to 20 grs. three times daily. It does not impair digestion or in any way disagree with the patient, is rapidly excreted by the kidneys, and arrests fermentation in the urine by sterilizing it, sufficing in a few hours to change a murky alkaline urine to one of normal clearness and straw color. After a faithful trial of carbolic acid, naphthaline, and other agents of that class, he had settled down on the boric acid as superior to all. Calomel should not be overlooked as among the certain and active diuretics. In the matter of washing, he preferred the glass fountain syringe to the globe. Like the writer, he held saturated solutions of boric acid in highest repute, though in most cases of chronic cystitis a 1-50,000 dash of bichloride of mercury is added.

Dr. J. W. Irwin had once a patient who discharged twelve ounces of pus daily. He had also enlarged prostate. Aged fifty-eight. Be-

gan treatment two years ago. He had atony and roughness of bladder, which he could not empty. I examined for stone and found none. Diagnosis: acute cystitis from enlarged prostate. The patient had never been catheterized, being prejudiced against it. Advised the catheter, if needed, several times daily whenever desire to urinate came. Comfort followed. Washed with water and emptied thoroughly, but he still had residual urine. He passed a great quantity of mucus and pus. There was much tenesmus. Then, through double canula with a Davidson syringe, injected one to two pints sat. sol. boric 100° 1 oz. to pint, according to detritus, until the water came away clear. Under this the patient would fall asleep. Catheter metallic; could not raise the temperature above 100°, owing to catheter getting too hot for urethra. With a small entrance tube and large exit tube it got away great quantities of pus and mucus, sometimes once or twice a day or less. Now this is done at least once a week. He has had a periprostatitis; also inflammation of anterior urethra. A large sound overcomes this and the spasmodic contraction. There is now no pus. Urine was offensive; it is now normal in color and small in quantity. Since the speaker has used argent. nit. $\frac{1}{16}$ gr. to oz. for inflammation. Likes the large injection. Much prefers double tube to the single, so large injections can be made. Thinks local means did the work. He gives internally boric acid 5 grs. every two hours; did some good, but quinine and large doses ergotin did the most good. Basham's mixture was also used.

Dr. Bloom asked: Could the patient urinate freely and empty the bladder entirely? Has the prostatic enlargement diminished?

Answer: The prostate has decreased. He passes a large stream of clear urine, and the general condition of the patient is every way improved.

Dr. Bloom thinks boric acid solution, injected by double catheter, would simply flow in and flow out, and not reach the diseased surface.

Dr. W. L. Rodman: In the treatment of acute cases the mention of hops and uva ursae in infusion has been overlooked. This was Gross' favorite treatment. No one remedy excels it. The more acute the case the better the

action of pichi. However, he likes corn-silk better; never has liked stronger silver injections. Gross, jr., uses 20 grs. to oz. of silver nit. It is a favorite wash with him. Very violent pain for twenty-four hours or longer results. The treatment is unnecessarily bold, and the results bad; $\frac{1}{4}$ or $\frac{1}{8}$ to oz. sometimes does good. Of course we must remove the cause; but in all cases where no removal of the cause can be accomplished, or where the case is severe, perineal section is the cheapest and best mode of treatment.

Dr. Vance referred to Anita water as being equally as good as Waukesha.

Dr. Cartledge would draw the line closer between acute and chronic cystitis. Pichi is not borne long, so should be used in acute cases chiefly. Nothing in gonorrheal tenesmus equals large doses of pichi. Calomel in acute cases in broken doses does good. Santalum in gonorrheal cystitis is good. He has found that it is hard to get the drug pure. If it can be had pure, it is a great remedy. In chronic cases we do not realize what Dr. Palmer has done in calling attention to the free use of boric acid internally. He gives it a long time, with no ill effects on the stomach. We ought to insist more in establishing a fistula. Sterilize with boric acid and drain the bladder thoroughly. Do the operation early, as, especially in old cases, there is danger in the perineal operation.

E. R. PALMER, M. D.,
Secretary.

ALLEGHANY COUNTY MEDICAL SOCIETY.

Special Meeting, February 19, 1890, W. S. Foster, M. D., President, in the chair.

TRACHEOTOMY FOR FOREIGN BODY.

Dr. Murdoch: A little boy was brought to the Western Pennsylvania Hospital recently, who five days before was lying on his back with a grain of corn in his mouth; he took a violent paroxysm of laughter, suddenly gave a very long inspiration and immediately was seized with a paroxysm of coughing and strangling. The parents, who knew that the boy had the corn in his mouth, surmised that it had gone "the wrong way" and into his windpipe, and commenced, as is customary with people in such cases, to slap him on his back, and, not succeeding in relieving his paroxysms of cough-

ing, they sought assistance from their family physician, who came and gave the child an emetic; the child vomited profusely, but was not relieved. He continued to cough, had violent paroxysms that night and all the following day, and then still further relief was sought, and every effort was made to dislodge this grain of corn from the windpipe. The child was inverted, shaken and slapped violently on the back; still other emetics were given but no relief came, and the father brought the little fellow to the hospital. He then presented every appearance of a child suffering from edema of the lungs. The skin of the face was livid. The child was evidently in great distress, breathing with considerable difficulty, and every few moments he would be taken with violent paroxysms of coughing. On examination of his chest I was unable to detect any abnormality in either lung by auscultation or percussion. But from the history of the case, and from the other symptoms, I thought we were warranted in opening the windpipe. Before putting the child under an anesthetic I inverted him and shook him, but the corn was not dislodged from its position. He was then anesthetized with chloroform, and that procedure was repeated without good effect. An incision was then made into the trachea; the second, third, and fourth rings of the trachea were divided, and when the forceps were introduced into the trachea the child gave a violent inspiration and then a violent expiration, and at once the corn came up from below and appeared at the opening. I made an effort to grasp it with the forceps but failed, and it went back into the trachea. Then by introducing a pair of narrow-bladed forceps to try to get the corn, the irritation of the forceps seemed to excite another paroxysm of coughing; the boy made another inspiration and after it an expiration, and the corn was thrown clear across the room, lodging some eight or ten feet away from the boy. It was picked up and found to be a very large grain. It must have been three fourths of an inch in length by half an inch wide and a fourth of an inch thick, and it was in a swollen condition, and evidently had it remained much longer in the boy it would have commenced to germinate. The case demonstrates

the value of the operation of tracheotomy. I believe, if this body had been larger and more spherical, it would have probably lodged in the larynx. That is the usual way children choke. If it is a spherical body, or a body like a piece of meat, it will be impacted in the larynx, and unless the child is relieved at once he necessarily perishes. When the body is angular, as a grain of corn, if lodged in the larynx, sufficient air can pass to sustain life. In all cases we are not so successful as I was in this one. Frequently, when the windpipe is opened, the surgeon is unable to get the foreign body. It may be impacted in one of the bronchial tubes, and even if it does not escape at the time of the operation, the chances of its escaping from an opening in the trachea are much greater than they would be for it to escape through the larynx.

DEAFNESS WITHOUT APPARENT LESION.

Dr. Allyn: A man in a mill was assisting a man much larger than himself at a roll; a link of a chain swung around and struck the larger man, breaking his nose and crushing his face, but simply pushing the smaller man to one side. This man showed no symptoms of prostration and presented all the appearances of being uninjured with the one exception, that as he was taken up he was absolutely deaf to all noises. Going over all the points I failed to elicit one point further than the fact that he could not hear. He had no aphasia, there was no paralysis of any of the muscles of the body, of the eyes or face. There was no paralysis of taste. The ear-drums were intact, the membrane being perfectly translucent and of the proper color, and no hemorrhage known in the case at any time. It possesses the simple fact of there being absolute deafness in both ears, caused by merely being knocked over and falling on the side of the head. I do not know what progress the case will make; it is of recent origin.

TREATMENT OF COMPOUND FRACTURES INVOLVING JOINTS.

Dr. McCann: I would like to talk about the treatment of compound fractures involving the joints, such as are attended by more or less destruction, not only of the bony tissues but

also of the soft parts in the vicinity of the injury. Such injuries result commonly, as they have fallen under my observation, from two causes; first, accidents which happen to brakemen in coupling cars, in which the elbow is caught between the "drawheads" or "deadwoods" of a pair of cars. In putting in the link to make the coupling, or in attempting to drop the pin, the elbow is caught directly between either the drawheads or the deadwoods. The result of this is an extensive fracture involving the elbow-joint with extensive laceration and bruising of the soft tissues.

The second form of accident is that which involves the ankle-joint, and in which the foot is caught either beneath the wheel or pinched by the brake-block. In one case, still under my care, the man fell between the trucks, his foot falling so that not the crown of the wheel but the flange passed across the outer and dorsal surface of the foot, opening the ankle-joint, but not cutting through the tendo Achilles, though tearing the skin as far as the inner edge of that tendon. In another case the accident involved the limb a little higher up, also opening the joint and crushing the astragalus. In the past efforts to save such limbs usually resulted in a secondary amputation or in the death of the patient. The method of treatment is certainly a very important element in the history of these cases. Under the old *régimé* the treatment usually adopted consisted in a sort of perfunctory cleansing of the wound, the application of carbolized oil or carbolic solution; the limb was placed in the position deemed most favorable in the eyes of the surgeon, and the reparative powers of nature were trusted to either cure the foot or to demonstrate the utter impossibility of saving it, if the patient did not die in the effort to find out whether or not his foot should be cut off. Within the past few years this has been modified, and the practice now (and I presume it is so all over the world) is to be guided by the extent of the injury. If the blood-vessels and nerves are not involved, even if the bones be extensively crushed, an effort should be made to save the part, and this effort is comparatively simple, or rather the principles upon which it should be carried out are simple. First, cleanse the

wound thoroughly, remove every thing, fragments of bone, of devitalized skin, of wood or iron, every thing foreign or liable to be septic. Then the limb should be thoroughly dressed antiseptically after being carefully washed in some solution, and the one I resort to is bichloride of mercury 1 to 1,000 or 1 to 2,000; the limb is then carefully put up in an antiseptic dressing, carefully but loosely applied so as not to constrict but to protect the wound. If there is any tendency for the tissues to fall into such a shape that there will be pockets, I have no hesitancy in making counter-openings and introducing whatever number of drainage-tubes may be necessary to secure proper discharge for the wound secretions. Now, having done this, the limb is placed on a splint, care being taken that there is no constriction of any part, that there is no tight bandage, no application which can in any way interfere with the arterial circulation or obstruct the return or venous circulation. The limb is elevated so as to favor the return circulation, and then dry heat is applied externally to all the dressings. The first dressings should be of sublimated or iodoformed gauze; borated or carbolated cotton is also applied to simply protect the wound by placing around it a sufficient amount of absorbent material to exert a very moderate degree of elastic compression and to prevent constriction. Now, under this treatment you will discover at the end of twenty-four hours that your limb is saved or is absolutely lost, and in the mean time you have protected your patient in the event of gangrene attacking the limb as a result of the traumatism. You have protected your patient against sepsis; and even if gangrene does occur, it does not spread with the rapidity it invariably assumes when the wound becomes septic. You have nothing to fear from the occurrence of that acute, spreading gangrene, the "gangrene of inflammatory sepsis" which has been the curse of surgery in the past. Usually at the end of twenty-four hours the first dressing should be changed, and it has been my habit to again cleanse the wound thoroughly, to pass a stream of some antiseptic fluid, usually the 1-2,000 bichloride solution through the drainage-tubes. Usually you will find one or two of them filled with coagulated

blood. This should be removed, and if the opening is large enough it need not be replaced. The second dressing should be applied just as the first. After this second dressing, it is usually unnecessary to replace the dressing for seventy-two hours or longer. A finger or toe should always be left uncovered, by which you can ascertain the condition of the extremities. If the toes or fingers continue warm when you expose them, and the capillary circulation perfect, you have nothing to fear. Now, under this treatment, if infection does not occur, the wound surfaces are not irritated by septic material. Suppuration does not occur. The discharges which flow from the wound are trifling in amount. The wound itself is comparatively painless. If there be dead portions, and usually there are, dead fragments of bone, dead shreds of skin or of bruised muscle remaining in the wound, of course they are foreign bodies; but the process of separation between the dead portion and the living goes on kindly and without suppuration. Without going further into the details of treatment, I may state that this plan should be carried on until the whole surface of the wound is cicatrized. The dressing does not require changing more than once in four or five days. Now, to close this matter, I may state that of all the cases I have treated, five have involved the ankle joint, two of them were complicated by fractures of leg bones, one of them with the splitting of the tibia for eight inches. In all the joint was widely laid open, extensive damage had been inflicted upon the bones, with great laceration and contusion of the foot and of the tissues around the ankle. In another instance, one in which the foot was caught under the flange of the wheel by the patient falling between the trucks, the flange traveled up along the outer surface of the foot, opening the ankle joint, crushing through the bones of the foot so that when the stitches which had been injudiciously applied were cut, the crushed portion of the foot dropped apart.

Now, under the method of treatment which I have advocated, thorough antiseptic cleansing, thorough draining, the use of loosely but thoroughly applied antiseptic dressings, this foot has been saved.

Dr. Buchanan: I think the Society is under an obligation to Dr. McCann for the practical and excellent manner in which he has laid down the rules for the treatment of these injuries. I believe the general principles he has enunciated are the accepted ideas on the subject, and they are very well established to-day; and for that reason I think we are disposed to take for granted that because Dr. McCann and certain other men, who see a very great amount of railroad and other surgery, do adopt these rules of conduct, their adoption is universal. I think this is a mistake, and I think we can very profitably stop and repeat these rules, as Dr. McCann has done for us this evening. The most unexpected results, I think, can frequently be achieved by careful, systematic, and methodical repair of injuries. I exhibited to this Society some time ago a case of complete excision of the ankle, with excellent motion, in which there had been extensive laceration and crushing of the joint. Since that time I have attended another case in which the ankle, and indeed the whole posterior and middle parts of the foot were so crushed that I hardly felt justified in asking the man to allow me to attempt to save it, but the man was urgent in his desire and would not permit the subject of amputation to be discussed; he knew the foot could be saved, and he gave no option in the matter, and somewhat against my judgment I excised the ankle-joint, put the foot together, and the result is that to-day the man walks very well with a cane, and will soon dispense with it. The astragalus, a portion of the os calcis, the lower extremities of the leg bones, and some pieces of the other tarsal bones were lost. The lower end of the tibia was wired to the lower part of the os calcis, and the soft parts of the foot were stitched together and dressed, as Dr. McCann has so well described. The patient recovered without a bad symptom. The wire was removed some weeks afterward. I have also treated a case lately with Dr. Huselson and my father, in which there was a laceration of the tissues about the ankle-joint, fractures of both malleoli, and complete disarticulation and projection of the leg bones, which plowed into the earth. This patient had his joint

cleansed and articulated; the inner malleolus was fixed into place with a buried wire, and there was no reaction whatever; afterward the man made an uninterrupted recovery.

TRAUMATIC SECTION OF BOTH TENDONES ACHILLIS.

I have also recently treated a case of injury to one ankle-joint, and to the leg on the opposite side, by a mowing machine. The man, who subsequently became the patient, stepped in front of the cutting bar of a mowing machine and struck the horses; the animals responded immediately; the cutting bar of the machine cut off the tendo Achillis, passed directly through the ankle, cutting off both malleoli, both posterior arteries, and the tendon of the posterior tibial muscle. On the other side the section was higher up; it passed through the tendon of Achillis and cut a piece off the tibia. Both the tendones Achillis were sewed with catgut, four stitches; the other stitches were put in place, and the usual antiseptic dressings applied without drainage. The man's wounds healed without any reaction or discharge whatever, and he walks well to-day without support. The union of the tendons was perfect. I think it is well to emphasize the fact that so long as there is circulation in a limb an effort should be made to save it, and I think also that such an effort will usually be successful. In one particular only I would make some difference in the treatment from that laid down by Dr. McCann. I think that as time goes on I see less use for drainage-tubes. When I first commenced to employ this treatment, I used a drain whenever I had a chance. There might have been some fluid, and there probably was some fluid blood running during the first twenty-four hours, but afterward it was coagulated; after the primary dressing of the wound I never washed it out, and in three or four days removed the tube with the clot in it, and have never seen any reason to change that practice; but I can believe that drainage-tubes are more used than is necessary, and that if we succeed with our antiseptics and apply proper pressure, we need not be afraid of any accumulation of fluid in a wound. I have also seen that if, in a soft

cavity there has been a serious accumulation because proper pressure has not been applied, such accumulation gives rise to no serious inconvenience, and when evacuated the walls of the cavity collapse and unite without further discharge. I would therefore think that, instead of endeavoring to put in all the drainage-tubes possible, I would limit them as a matter of convenience. The tube does no harm if properly used, but I think it is, as usually applied, unnecessary.

Dr. Huselton: In the main I agree with Dr. McCann. I want to say that the amount of drainage done to the skin in the case of a crush wound is no criterion of the amount of damage done to the interior parts, bones, muscles, nerves, and vessels, and in accordance with my experience I think that where a hand, a wrist-joint, an arm, or an elbow-joint, is caught between the bumpers of a car, the couplers or the deadwoods, sufficiently to produce a fracture, even if not compound, the best thing to do is to take that limb off; if you do not you will regret it and have to do it afterward. I have had considerable experience with injured ankle-joints in railroad accidents. One of them was produced by the flange of a wheel; the joint was open so that I could put my fingers in. This I dressed antiseptically, cleansing it of all foreign material, washed it out, put it up antiseptically with a splint, without a drainage-tube. I do not use drainage-tubes very often, and I think I shall use them less often hereafter. This man got well, and left my care before he had perfect locomotion in the joint; it had entirely healed, there was considerable motion; he was making a pretty good stagger at walking. In another case, in which the right limb was crushed from the knee to the ankle-joint, the left ankle was open so you could see into it also. In this case I amputated the right leg. I treated the ankle-joint as in the previous case described, and the man to-day has a perfect ankle joint and a good wooden leg, and is walking around as well as any of us. I do not change the dressing so frequently as does Dr. McCann; sometimes do not remove the dressing for a week. I am governed entirely by the condition of the part and by the pa-

tient's condition as to temperature and pulse. If there are symptoms indicating the necessity of removing the dressing, I remove it, otherwise I leave it alone.

Dr. Rigg: I would like to say a word in reference to the class of wounds spoken of by the gentlemen who have preceded me. In 1882 I treated my first compound fracture of the elbow. It was caused by an accident to a young man at work in a coal mine; he fell in front of a wagon, his foot caught in a frog, throwing the wagon off the track, the wagon running over his arm and elbow-joint about the middle third. The superficial veins were lacerated, the arteries intact. The bleeding was controlled with little trouble. Since it was my first case of the kind, I took two physicians with me when I went to see the case a second time. They insisted on amputation. I removed at that time, I think, a half dozen small pieces of bone; the young man insisted on leaving the arm as it was, believing there was a fairly good arm left. My plan was to treat it antiseptically, strictly so, and I placed it on an incline, put no tight dressings to it at all, and had my dressings laid in such a way that I could at my own pleasure remove a portion of them to see what was going on beneath. I might say that the shortening, as nearly as I could make it out, was three and a half inches. I continued on this plan of treatment, and I may say without drainage-tubes, until the arm was well and there was fair motion. There was never perfect motion. The humerus was very much thickened by reason of the fragments of bone not being adjusted closely. As to drainage-tubes, I have used few. The last two cases of amputation I had no drainage-tubes were employed; they were amputations of the breast, and I believe them to be fairly good cases to test the value of a drainage-tube, there being much surface made bare; and in both cases there was primary union throughout, something I have never seen where a drainage-tube was used, and I feel that, if the anti-septic treatment is followed out strictly, a drainage-tube in the majority of cases is of little or no value, and oftentimes a little disadvantage.

Dr. McCann: I want to say a word in re-

gard to two or three of the criticisms. In the first place, I do not think that because a limb, elbow, or wrist, has been caught between a deadwood or a drawhead, it necessarily requires amputation. I can show any one who is curious enough to come to the West. Penn. Hospital instances where not only the bones were crushed, but the soft parts also, that were saved.

As to drainage-tubes, I do not like to introduce a foreign substance into a wound, would rather get along without it if I could; but for a crush involving the tissue of the joint or the muscles there must necessarily be a large amount of fluid secretions.

Now, I do not care whether they are pent up underneath the skin without any access to air, they are likely to generate poisonous and irritating leucomaines, which cause local irritation and constitutional infection. We all know that before the days of antisepsis the tight closure of wounds was far less favorable in its results than the open method. Who can be sure, when he closes his wound, that he has rendered it aseptic? And if he has accomplished this, there may be floating in his patient's blood germs capable of infecting the wound.

Dr. Buchanan: There are two points on which I wish to speak. The first is the possibility of saving a limb that has been fairly and squarely caught between the bumpers, with fracture of the bones. I believe it can often be done, and I will cite a single instance. About six or eight months ago, I was called with my father to see a little girl whose arm had been caught between the bumpers of two freight cars; the arm was crushed, wholly crushed from the wrist to the elbow. The vessels were not injured, but there were multiple fractures of both bones, and considerable pieces of bone had to be taken out. I think it safe to say more than half the muscular tissue was crushed off. The skin was extensively lacerated. The arm was shapeless. I do not think any injury could deserve the name of crush better than this one. It was so evidently a serious injury that her parents and friends and all persons who saw it thought the arm must be amputated. This arm was not ampu-

tated; it was thoroughly cleansed and put together, dressed with a straight splint; on no other kind of splint could the arm be kept in the semblance of an arm. It united without any suppuration, as is usual in such cases when antiseptically dressed, and while the child has not a beautiful arm, nor a very straight arm, she has a hand and a wrist and an elbow-joint that are almost as useful as before. Now, as to drainage-tubes: I think it is hardly fair to bring up the surgery of ancient times to prove that drainage-tubes are good things. We will all admit that the essential object of a primary drain is to eliminate fluids which might become the breeding-place for micro organisms. And I am further satisfied that, if we can exclude local infection of the wound, we need have no fear of its infection through the general circulation.

Dr. Green: As I understand Dr. McCann in regard to drainage-tubes, in applying an antiseptic dressing it is true of course that nobody can be positive that he leaves the wound without any danger of sepsis; I care not how carefully a wound may be washed, it is simply impossible to remove all the putrescible matter, a portion of it is bound to remain in the wound. It seems, therefore, the part of wisdom to provide means for its discharge.

Correspondence.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Dr. Demoine, an army surgeon, has published a note in the *Bulletin de Therapeutique* on the treatment of dysentery by enemata of the bichloride of mercury, from which he obtained the best results. Having had to treat, he says, a great number of dysenteric patients at the military hospital at Oran during the summer of 1888, and others since that time, he at first employed ipecacuanha either in mixture or in powder, but he did not obtain the results expected of this drug. It was not well tolerated, and it determined repeated vomiting, which fatigued the patients in a considerable manner. He found that calomel

succeeded better, and he continued its employment in subjects who did not present phenomena of gastric intolerance. But, as a great number of patients complained from the commencement of nausea and vomiting, he had recourse to another mode of medication, that is to say the employment exclusively of enemata, of which Van Sweiten's liquor (a solution of the bichloride of mercury) formed the active part. The results of this method, says the author, were sufficiently good to induce him to publish them, and he adds that two hundred and two patients were treated by the mercuric salts. Very small doses of calomel were at first administered, during the first days, to those who had no gastric intolerance nor vomiting. For the other patients the following was the composition of the enemata: At the commencement the solution of the corrosive sublimate was employed in the proportion of $\frac{1}{5000}$, and the patient had three enemata per day of 200 grams each. Later on the solution was of the strength of $\frac{3}{1000}$ and the patients had only one enema per day. More frequently an immediate improvement was perceptible, and from the following day the bloody and slimy stools were suppressed. The point particularly remarked by the author is the almost complete disappearance of the anal tenesmus, which is the cause of the pains, and the colicky pains were also diminished almost immediately. The enemata should be given lukewarm, for when cold they do not remove the intestinal pains. For some patients it was necessary to add a few drops of laudanum to the solution. The antiseptic action of the mercurial enemata is here evident. This treatment was found efficacious not only in Algiers, but in a recent epidemic at Lyons it succeeded better than any other.

In a recent clinical lecture Prof. Dieulafoy treated of the therapeutics of asthma in the following manner: At the beginning of the attack paint the inside of the nostrils, as high up as possible, with a camel-hair brush dipped in a solution of hydrochlorate of cocaine (1 in 20). If preferred, the solution may be sprayed into the nose and throat for four or five minutes at a time, with a tablespoonful of the above solution. If this does not succeed, the

patient should be made to inhale from six to twelve drops of pyridine, sprinkled on a handkerchief. The cocaine and the pyridine may be employed simultaneously. When the attack is at its acme, the following solution may be injected hypodermically: Hydrochlorate of morphia 10 centigrams, distilled water 10 grams, of which half a syringe should be injected, to be repeated in a quarter of an hour if necessary. The remedy *par excellence* for asthma is the iodide of potassium, given in doses of from 20 to 30 grains daily, but commencing with 5 grains only, to be gradually increased. To combat the diathesis there are three principal medicaments, the iodide of potassium, belladonna, and arsenic. The author recommends the following course of treatment: The patient should take from 15 to 30 grains of the iodide daily for 15 days, then the iodide should be replaced by pills composed of powdered belladonna leaves and the extract of belladonna, of each 4 grains, to be made into 20 pills. At the same time the patient is to take a teaspoonful daily of the following solution, after the principal meal: Arseniate of soda 1 grain, distilled water $2\frac{1}{2}$ fluid ounces. If the patient be emphysematous, the use of baths of compressed air will also be found useful.

In a note in the *Progrès Médical* Dr. Petit gives the following advice respecting the exhibition of the bromide of potassium. The first point to bear in mind is to avoid too rapid an increase in the amount of the drug, as otherwise gastric troubles and intense prostration may result. Not more than 20 or 30 grains should be given daily to begin with, and every two or three weeks the amount may be augmented by 10 grains, until as much as one and a half to two drams have been reached. This, the maximum dose under ordinary circumstances, should not be attained in less than six months. The dose for males is somewhat higher than for females, 60 to 70 grains for the former corresponding to 40 to 60 grains for the latter. The purity of the drug is a matter of considerable importance, and should be made the subject of special attention from time to time.

In the *Union Médicale* Dr. Darthier extols

the internal administration of the tincture of iodine for the relief of vomiting, a method which has been employed for years both in America and England. He has observed its use in nineteen cases, eleven of which were tuberculous subjects, and has formed the opinion that it is of more value in the vomiting of early phthisis than in the later stages of that disease. He relates instances of advanced cases with obstinate vomiting, where the symptom was largely controlled by the drug. The drug also proved useful in cases of alcoholic gastritis, in gastric ulcer; and in the vomiting of pregnancy and of chlorosis Dr. Darthier recommends the French tincture of iodine to be administered in 10 drop doses, diluted with two wineglassfuls of water, to be taken in three portions immediately after meals.

The *Moniteur Therapeutique* gives the following rules for the summary analysis of the urine. It recommends the method adopted by Hager as being worthy of trial. It consists of placing a drop of urine on unglazed paper, such as blotting or filtering paper, and to hold it at two or three centimeters above the chimney of a good petroleum lamp, taking care that the paper be not singed. The following phenomena are observed: In normal urine the spot is scarcely visible, without a border, sometimes of a pale yellow. In albuminous urine the spot is yellow or yellowish red, without border or with one scarcely perceptible. In glycosuric urine there is a yellowish brown spot, or it may be brownish, brown, or dark brown, according to the quantity of sugar, and always with a very distinct border.

PARIS, March, 1890.

Translations.

UNDER THE CHARGE OF I. N. BLOOM, A. B., M. D.*

THE INFLUENCE OF HOT BATHS ON THE ELIMINATION OF MERCURY IN THE URINE.—Dr. Borovský, of Kieff, has carried out a long series of clinical experiments on twenty-eight syphilitic patients, in order to study the influence of heat on the elimination of mercury from the system through the kidneys. He has

employed ordinary hot water baths (28°–34° Reaum., of thirty minutes' duration), artificial sulphur baths (30°–34° Reaum., of twenty or thirty minutes' duration), and hot-air baths (60°–80° Reaum., of fifteen to thirty minutes' duration). The principal results of his investigations may be summarized as follows: (a) Both tepid and hot-water baths, as well as sulphur and hot-air ones, invariably increase the elimination of mercury in the urine; (b) the elimination proceeds the more energetically, the higher is the temperature to which the patient is exposed; (c) a mercurialized organism actually can be completely freed from mercury by the means of a systematic employment of heat in one form or another; (d) in such cases, where the elimination of mercury ceases spontaneously, it can be made to reappear by the use of hot baths; (e) mercurial stomatitis can be cured by heat more quickly than by other means; (f) hot-air baths, while inducing an enormous perspiration, promote the elimination of mercury also through the sweat glands; (g) a simultaneous treatment of syphilis by mercury and heat may sometimes effect cure more quickly than a mercurial treatment alone; (h) in patients with diseased vascular systems the use of hot water requires great caution. (Ch. Szadek, *Inaug. Dissert., British Journal of Dermatology.*)

ON SCRAPING OUT SOFT CHANCRES.—Dr. Petersen, of St. Peter-burg, has recently called attention to the beneficial action of scraping with the sharp spoon in the treatment of chancre. (This method was first recommended by Spillman, of Nancy, *Ref*) Author has treated one hundred and sixty-two cases of soft chancres by means of scraping out after the following rules: Having cleansed the ulcer and surrounding skin with a corrosive sublimate or carbolic solution, he winds the parts with a piece of cotton-wool soaked in ether, and then treats the chancreoid ulcer with a sharp spoon. To make the operation painless, he previously injects under the skin a two-per-cent solution of hydrochlorate cocaine; in ten minutes anesthesia is complete. The procedure over, he dresses the raw surface with iodoform powder and gauze. In simple cases the ulcer cicatrizes,

* Translated by Dr. Chas. Szadek, of Kieff, Russia.

on an average, in nine days. In six cases healing was complete in three days, and in twenty-five in five days. (Ch. Szadek, *Wratsch. St. Petersburg*, 1889, 18; *St. Petersburger Medic. Woch.* 1889).

TREATMENT OF VENEREAL CHANCRES BY SOZOJODOLKALI.—Dr. Ch. Szadek, of Kieff, urges the claims of sozodolkali as a substitute for iodoform in the treatment of venereal sores. Sozodol contains about 52 per cent of iodine, 20 per cent of carbolic acid, and 7 per cent of sulphur; its potassium salt dissolves to the extent of 2 per cent in water. The merits of the sozodolkali are that it is odorless and tasteless; it is antiseptic, a promoter of granulation and healing, and it arrests suppuration. Author has used the sozodolkali with success in twenty-eight cases of soft chancres. The powdered substance is applied to the ulcer and covered with a thin layer of wadding, over which is placed the ordinary dressing. The dressing is changed every twelve to twenty-four hours. (*Medycyna*, 1889, 35.)

TREATMENT OF PSORIASIS BY IODIDE OF POTASSIUM.—Dr. Barduzzi (*Italia*) has found that his experience of the effect of iodide of potassium in cases of psoriasis tallied with that of Gracve, Boeck, and Haslund. In three diffuse, universal cases of very inveterate character, which had been treated with transient success by all the usual remedies, he obtained results from iodide of potassium which he had never hoped to get. In none of the cases was the amount of the drug larger than 7 grams (105 grains) daily. (Ch. Szadek, *Gazzetta d'Ospit.*, 1889, 17.)

Abstracts and Selections.

A STUDY OF PUERPERAL ECLAMPSIA.—Most members of the medical profession need no definition of puerperal eclampsia; for, once having been seen, the disease is never forgotten. That it is one of the most formidable of all diseases that fall to the lot of the obstetrician to treat, is acknowledged by all authorities. Its exact pathology has never been clearly worked out, yet that it is a subject fraught with great importance to the human family is shown by

the fact that one tenth of all the deaths of pregnant and parturient women is the result of puerperal eclampsia. It is not a matter, then, to be wondered at that so many have attempted to work out the etiology of such a malady, and also to discover successful treatment for it.

Etiology. For many years there has prevailed an opinion in the minds of the profession that there is some close relationship existing between albuminuria and puerperal convulsions. While it is true that in a large majority of cases there is albumen in the urine of eclamptic women, yet there have been a few cases recorded in which no albumen was found at any time previous, during, or after the attack; and in many cases it has not been found, though repeated examinations were made, until after the convulsions have actually begun.

This brings us to a consideration of the first division of our subject, viz:

1. *Eclampsia associated with Albuminuria.* It has long been known that a large percentage of pregnant women have albumen in their urine, and that the albumen makes its appearance after conception. This per cent varies from four to twenty, according to the observations of different authors. Fordyce Barker gives the smallest per cent—one case albuminuria in twenty-five pregnancies. Now, eclampsia is said to occur about once in 450 pregnancies. If four per cent or eighteen of these 450 women have albumen in their urine, and only one has an attack of puerperal convulsions, there are left seventeen women with albuminuria who have no convulsions. Then clearly albuminuria is not the cause of eclampsia.

We arrive at the same conclusion by a consideration of the second division of our subject.

2. *Eclampsia not associated with Albuminuria.* In a great many of the cases in which albumen was found in the urine of eclamptic women, it did not appear until after the attack had commenced; and in a few, never appeared at all. In these cases, the albumen theory will not account for the convulsions, because in some it was never present from beginning to end. The convulsions, however, seem to have either produced the albuminuria, or the albuminuria and convulsions are both the effects of a common cause.

The albumen in itself has no morbid influence; but it is known that when albumen—a natural constituent of the blood—is found in the urine, the excrementitious products are retained in the blood, and exert their poisonous influence on the vital economy. Urea has

long been considered the chief element of harm in these cases; but, as it is shown above, the majority of pregnant women who have albuminuria do not have eclampsia, and some who have eclampsia do not have albuminuria; therefore the urea retained in the blood can not alone account for the trouble.

To get a better insight into this part of our subject, let us examine into,

3. *The Conditions of the Kidneys during Pregnancy*, as these conditions must exist in eclampsia also.

At about the fourth month of pregnancy the gravid uterus rises out of the pelvis and begins to exert a pressure on all the viscera around it, viz., the whole urinary apparatus and the intestines. The cervix uteri, which shares in the increase of size of the whole organ, presses on the ureters, stretching and deflecting them out of their natural course. Here, then, is set up a mechanical obstruction to the free flow of urine from the kidneys to the bladder. The urine being thus retarded in its course, collects in the ureters and kidneys, and by its pressure and decomposition gives rise to an irritation of the lining membrane of the ureters and tubules. As a result of the irritation thus produced, the functions of the kidneys are perverted; albumen is found in the scanty urine, and the poisonous elements of metabolism are not eliminated.

This theory of mechanical obstruction, as above described, has been dwelt upon at some length by Dr. Kucher and others, as a probable cause of puerperal eclampsia.

To follow up the same line of study, we find that, in the latter months of pregnancy, the gravid uterus, besides pressing on the ureters, rests upon the blood-vessels leading to and from the kidneys. This pressure interferes with a well-balanced circulation through these eliminating organs. Not only this, but the body of the kidney itself is a victim of the enlarged uterus; and a pressure on this organ, together with its interrupted circulation, often brings about a state of inflammation which results in a scanty secretion of urine, a leakage of albumen, and also retention in the blood of the poisonous excrementitious products of tissue disintegration.

This is another phase of the "obstructive theory" as a cause of puerperal eclampsia. While all this is sufficient to account for the scanty urine, the albuminuria, and retention of poisons in the blood, it does not give us a clue to the source of the poison or poisons of puerperal eclampsia.

There are four well known sources of all the poisonous elements which should be eliminated by the kidneys. According to Bouchard, these

are (1) aliments, and more especially their potassium compounds; (2) the absorbed soluble products of intestinal putrefactions; (3) secretions, such as the bile, saliva, etc.; (4) tissue disintegrations.

Now, eclampsia can not be caused by the poisons derived from the *first* source, because it would not necessarily be connected with the pregnant state, if it were the result of poisons thus taken into the system.

It can not be due to those derived from the *third* source, because, in pregnancy, the secretions, such as the bile, saliva, etc., are not materially changed.

Nor is eclampsia caused by the poisons derived from the *fourth* source, or tissue disintegrations, for urea is the chief product of tissue disintegrations, and it has been already proven that urea can not account for puerperal convulsions.

As there is only one other source of those poisons that are eliminated by the kidneys, here then must originate the poison or poisons that are so potent in producing convulsive seizure in pregnant women; and this source we will now discuss, viz., the absorbed soluble products of intestinal putrefactions.

Every physician knows from personal as well as professional experience that constipation produces severe headache, vertigo, and great mental inactivity; that those who suffer with constipation are subject to insomnia, or sleep is unrefreshing. In habitual constipation there is at times a temporary loss of consciousness, and often the person thus afflicted is hypochondriacal. These symptoms are produced by poisons that result from the putrefactions that are always going on in the intestines; and when there is constipation, the feces remain in the bowels long enough for the soluble products of these putrefactions to be absorbed. If these products are so poisonous to the system in a case of temporary constipation as to produce a feeling of languor, headache, and a marked inability to use the mental faculties, they must necessarily be a power of evil in the pregnant state, where constipation so often exists for some time. Constipation in pregnancy is due not only to the change in the habits of the pregnant woman, but to a great extent is caused by pressure of the gravid uterus on the intestines, especially the upper part of the rectum and the sigmoid flexure. So, when the feces are thus retarded in their course to the place of exit from the body, there is time for the absorption of all the soluble products of intestinal putrefactions to take place. These products enter the circulation and can not be eliminated by the kidneys, as in temporary constipation, because, as al-

ready described, the gravid uterus often brings about an inflamed state of these organs by its pressure on them.

Here, then, we have the source of active poisons to the system, intestinal putrefactions, and an additional avenue of exit locked up in the inflamed kidney. With this state of things in the pregnant woman, we are not surprised at the terrible results of a disordered secretion of the kidneys.

A table containing a few cases collected from the American Journal of Obstetrics shows that of the 66 cases collected there were five women who had puerperal eclampsia without having albuminuria before the attack, and two of these five women had no albumen in their urine at any time before, during, or after the convulsions. In these cases the trouble was certainly not due to albuminuria.

52 of the 66 cases were primiparæ. This fact shows the greater frequency of the disease in first pregnancies. In 33, the convulsions came on after labor; in 12, before labor; in 21, after labor. In 8 cases chloroform and other sedatives failed to control the convulsions, and in 3 or 4 the convulsions continued while the patients were thoroughly anesthetized. Two such cases came under the writer's observation.

In one of the two last cases reported in the table, no physician was called in until after the patient had had nine convulsions, and had been in a deep coma for more than six hours. The midwife who attended her told the family that the convulsions were very "hard pains." Chloroform was administered, but failed to control the spasmodic seizures; bleeding was then resorted to with slight abatement in the number of convulsions, but they did not cease until two doses of the sulphate of morphine were given hypodermically; she died twenty-six hours after I first saw her. She was a primipara, unmarried, and had attempted to produce abortion several times during her pregnancy.

In the second case of the last two in the table, chloroform was given while the child was forcibly delivered. The os uteri was not dilated, and there were no pains of any consequence. The operation took an hour and a half, during which the patient had three convulsions.

The table shows a larger percentage of recoveries than is generally given in our text books, there being only 33 deaths in the 66 cases collected. Dr. Kneher reports 52 cases, with a mortality of 7. His treatment was mainly chloral hydrate and sulphate of morphine as sedatives, while he attempted to eliminate the poison by diuretics and hydragogue cathartics whenever his patient was able to swallow.

The treatment of puerperal eclampsia may, for convenience, be divided into (1) sedative, and (2) eliminative.

In the first division may be classed chloral hydrate by itself, and also combined with bromide of potash, sulphate of morphine, chloroform, and veratrum viride.

Chloral hydrate is usually given in combination with bromide of potash, by enema. From 30 to 40 grains of chloral, with twice that amount of bromide, can be administered at a single dose, and half as much every two or three hours. This is one of the best methods of counteracting the poison by sedatives, yet many physicians rely more on the sulphate of morphine given in large and repeated doses hypodermically. Chloroform is another drug that has been used extensively in the treatment of puerperal eclampsia, but in many hands it has failed either to arrest the spasms or prevent their occurrence.

Of late years veratrum viride has gained quite a reputation in controlling the convulsions of eclamptic women. A writer in the Medical Record of September 7, 1889, reports 23 cases treated with veratrum viride, with 23 recoveries—3 drops of Norwood's tincture given hypodermically, and repeated in one hour; then 2 drops every hour or two till the patient has a cord like feeling in the neck.

How it acts has never been satisfactorily explained. It does not eliminate any thing, but, like the soup stone, if enough seasoning is used you can make soup from it.

The eliminative treatment may be subdivided into (1) diuretics, (2) diaphoretics, (3) hydragogue cathartics, and (4) venesection.

Diuretics are always indicated, and with cathartics are the best remedies for preventing eclampsia. Even after the attack has come on they are beneficial, if the patient can be made to swallow them. The drugs generally used for their diuretic effect are digitalis, acetate of potash, spirit of nitrous ether, and more recently jaborandi in large doses. This last drug, however, has a double action—that of a diuretic, and at the same time that of a diaphoretic, especially the latter. If its alkaloid, pilocarpine, is given, it eliminates the poison by stimulating the sweat glands to greater action, but it is sometimes uncertain in its effect. One great objection to the drug is the danger of drowning a comatose patient in her own fluids, as it causes the secretion of a large amount of saliva and also the bronchial fluids.

Other methods of producing diaphoresis are hot baths, and the hot pack. This method has acted well with morphine, the latter controlling the convulsions, and the hot pack eliminating the poison by its diaphoretic effect.

As already mentioned, if the patient can be made to swallow, hydragogue cathartics are among the most powerful remedies in eliminating poison from the system, and especially, when the kidneys do not act, cathartics are beneficial, not only in driving the poison out of the intestines and preventing further putrefaction, but also in taking the poison out of the blood, thus acting vicariously for the kidneys. These cathartics are indicated both as prophylactic and curative remedies, if the theory of intestinal putrefaction with urinary obstruction as a cause of puerperal eclampsia be correct.

No matter what the cause of eclampsia is, venesection is one of the most effective as well as one of the oldest methods of treating it. It has been abandoned to some extent by many authorities, but without good reason. They say that the woman needs all the blood she has, and that bleeding only weakens her and lessens her chances for recovery. They seem to forget that although the woman needs blood, she does not need poisoned blood, and such is the condition of the blood of an eclamptic woman. A bank would not be considered in a proper condition if a great part of its capital was counterfeit.

Bleeding is the quickest and one of the surest methods of getting rid of some of the poisoned blood, and while it is true that the amount of blood soon becomes the same, it is also true that the poison is more diluted, and therefore less potent. There are some patients whose constitutions contra-indicate the bleeding, but whenever it can be used in connection with the other remedies it is one of the surest methods of controlling the convulsions and eliminating the poison of puerperal eclampsia. *Dr. J. T. Graham, Virginia Medical Monthly.*

DIAGNOSIS OF PREGNANCY BY THE CHANGES OF THE URINARY PHOSPHATES.—In the *Virginia Medical Monthly* for March, 1887, there appeared an article by Dr. William B. Gray, of Richmond, Va., on "The Diagnostic Value of the Phosphates in Pregnancy." It is to be regretted that the article did not meet with a wider circulation than it appears to have done. No allusion to it was seen in the exchange journals, and no book on the examination of urine makes mention of it. This silence must surely be from lack of investigation. As a physiological fact, it demands recognition; as a practical fact, it deserves the careful consideration of every general practitioner. To call the attention of the profession to this discovery, and emphasize again the diagnostic value of the well observed and clearly defined changes of the phosphates of pregnant women, as seen under the microscope, and ask from each an

investigation of its claims, prompts the writing of this article.

In all hyper-taxations of the cerebro-spinal system the eliminations of the phosphate is increased. That this is true in pregnancy, Dr. Gray has demonstrated by a careful analysis of the urine. In his original article referred to, he gave the result of the examination of fifty-four specimens of urine obtained from twenty-four patients. "Of these, the smallest amount of phosphates found was one third grain to the dram; the largest amount, two and one third grains to the dram, though the increased excretion did not seem to be regularly progressive with the advance of gestation." The method used for precipitating the phosphates was by adding to the urine in a test-tube about one third its bulk of the magnesium fluid, given by Dr. Tyson in his book, composed of one part each of sulphate of magnesia, chloride of ammonium, and aqua ammonia, and eight parts of water.

What most concerns the busy practitioner, however, is the microscopic appearance of these crystals, for by it can be made the diagnosis of pregnancy weeks in advance of other signs of that condition. One should be thoroughly familiar with the details of the normal crystals before attempting to recognize any departure therefrom.

The normal triple phosphate is precipitated in those beautiful feathery crystals, sometimes a single leaflet, or in stellate forms; but, however seen, each feather is perfect. If only a fragment is observed, the feathery appearance is preserved to its extreme tip, equally clear on each side of the central stem.

As soon as conception occurs, the appearance of the triple phosphate changes. It begins to lose its feathery appearance, and disintegrates. The change commences at its tip, and progresses toward its base; or only one side of the leaflet may be affected, leaving the other intact. As the disintegration progresses, only the bare stem may be left, with perhaps a few scraggy points jutting from its sides, and even these stems broken into bits with scarcely any mark to identify them as triple phosphates. These changes commence in the phosphates within twenty days after conception, and continue for several months. After the middle of the seventh month, Dr. Gray observes that these changes become less pronounced, and gradually approach a more normal type, up to the end of gestation.

Another important and useful fact he records is, that, should the death of the fetus occur during gestation, the phosphates at once become normal.

The discovery of so simple and certain a

method of diagnosing this condition deserves a better fate than to fall still-born on the professional ear. The evidence of the facts as recorded is unmistakable, and the diagnosis of pregnancy can be made without exciting the suspicion of the patient as to the object of the physician.

Among the first specimens of urine examined by the writer was one brought by a physician as a test. The changed appearance of the phosphates was characteristic and the diagnosis of pregnancy made. The physician then related that the urine was from a woman over forty years old, the keeper of a "bawdy-house;" that she had been a prostitute for twenty-five years, and had never been pregnant. On learning that her period was overdue some ten days, he asked her for the specimen of urine, which showed the pregnant phosphates. The diagnosis of her pregnancy was received by the laughter and ridicule of the patient and her companions. The doctor, however, fixed the date of her confinement and left. His prediction was fulfilled within twenty-four hours of the time set for the labor.

After an experience of nearly three years examining many specimens for other physicians, "the diagnostic value of the phosphates in pregnancy" is confidently relied upon, and the profession owes Dr. Gray a debt of recognition for his discovery and painstaking investigation of this subject.—*Dr. S. W. Budd, Virginia Medical Monthly.*

A CASE OF PHYSOMETRA.—Mrs. M., blonde, aged eighteen, married twelve months, has been under my treatment for the last eighteen months. Previous to her marriage, I was treating her palliatively for an ovarian trouble—pain, tenderness and constant burning in the right iliac region—preparatory to doing the operation of ovariectomy, which was deemed advisable, owing to the recurring and troublesome reflexes which the ovarian lesion excited. In consideration of the dangers of so serious an operation, and the near approach of her marriage, I was admonished by her affianced to postpone the operation for a short while at least, and indefinitely if possible. This I readily consented to, with a resolve to watch developments. Her marriage took place at the appointed time, and the changes in her life incident thereto seemed to produce an abatement of her neuroses.

In about six weeks, however, I was called to see her for persistent nausea and vomiting. Her menses, which previously had been quite regular as to time and quantity, had failed to appear. This fact, in connection with her

other symptoms, caused me to suspect pregnancy.

My next visit, six weeks afterward, was for the purpose of relieving her of a "nervous chill." I found her much prostrated and bathed in a cold, clammy sweat; the muscular system was in a state of rapid but not violent tonic spasms, sufficient, however, to shake the bed upon which she was resting. A slight discharge of menstrual blood had taken place the day before. I made a digital vaginal examination, and found every thing in an apparently physiological condition, but palpation revealed an enlarged, firm uterus. The symptoms just noted presented themselves at the two next menstrual epochs.

About the fifth month, however, a change took place. The menstrual blood, which had never since the beginning of its appearance at the twelfth week exceeded an ounce or two, failed to appear entirely. Her nervous chills continued to recur periodically. The uterus maintained its firmness and progressed in its enlargement. At this time the lady informed me she could feel movements of the child distinctly.

The case now presented every feature of pregnancy, even to enlargement of breast. A slight diarrhea had set in, which was promptly relieved with astringents.

No symptoms worthy of note presented themselves during my monthly visits except the periodic cold, nervous spells, for the relief of which I was regularly called; in addition, a visit was made every two weeks for the last month or so, simply to look after the safety and welfare of my patient.

When seven months had elapsed I was hurriedly called one afternoon to see her. A "chill," as usual, and she had a countenance expressive of bitter disappointment. She accosted me with this question, "Doctor, why did you fool me?" I assured her she had not knowingly been deceived, and asked in what way a disappointment had come. "Why," said she, "I am not going to have a baby; examine me and see." An examination was made. I introduced a medium sized Sims' speculum easily, as I had always done, but the vagina and os uteri externus furnished no evidence of the passage of a child. Nothing was discovered by palpation save lax abdominal walls and a slightly larger and softer uterus than normal. She informed me that no blood had escaped, and no air that she knew of. The change had occurred a night or two previously, unknown to her until she awoke the next morning. Her menses reappeared at the proper time, but each flow was accompanied by a nervous spell. I began the administration of Sharp & Dohme's

elixir of helonias compound, and the benefit derived from this most excellent preparation has been so great that I have not paid her a visit for about three months. Her husband reports her as being in better health than for years.

This case presents some very interesting facts. The hymen was ruptured, as evidenced by the visible carunculae myrtiformes. There was no atresia either of the ostium vaginae or of the vagina itself. The external os uteri was not occluded. For obvious reasons I did not introduce a sound into the cavity of the uterus. It is reasonable, however, to suppose it was not stenosed, for the menstrual blood escaped through it before and after marriage. There were no evidences either of hydrometra or hematometra. The patient has never been hysterical.

From all available literature this fact is gained: "It is a rare occurrence for the secretion to decompose with the formation of gas and give rise to physometra, which betrays itself by the escape of flatus from the vagina." (Ziemssen's Cyclopaedia, Volume X: "Atresia Vaginae," page 53.)—*Dr. Gahagan, Virginia Medical Monthly.*

CHRONIC MORPHINISM.—A valuable communication on the subject of morphinism was recently made by Dr. Arthur Wynne Foot to the Royal Academy of Medicine in Ireland. To us the most important parts of the paper are those relating to prognosis and treatment. As regards prognosis in morphinism, Dr. Foot does not consider it so favorable as was at one time believed. In the opinion of some authorities the morphine habit belongs to the category of diseases which are almost incurable. The weaning from it is a laborious task for the patient as well as the physician, and yet thereon rests the only hope of recovery. It is considered by those who have had the longest experience of such cases to be easier to cure a morphine eater of his craving than a morphine injector. The probability of a cure may be estimated by attending to the following points: (1) The duration of the habit. Cases of short existence are more successfully treated than those in which the habit of long standing has exercised a deleterious influence on mind and body. (2) The persistence or not of the condition which gave rise to the exhibition of the drug. If this condition be irremovable, a cure is scarcely to be expected. (3) The physical and nervous constitution of the patient. Bad effects follow the withdrawal of morphine in cases of weakly individuals, or in those of specially nervous temperament. The magnitude of the dose does not much af-

fect the prognosis, except in so far as the larger doses indicate chronicity of the habit. It is a hopeful consideration that in most cases to break the habit means to get well, because, unlike alcoholism, the morphine habit does not entail structural lesions of any vital organ. Relapses, however, are very frequent, being more common in men than in women. So great is the tendency to relapse that Jaeckel does not consider a cure to be accomplished by the mere suppression of the morphine hunger, but considers the continuance of control over the patient in a proper institution of the greatest importance. Dr. Wynne Foot's practical remarks on the treatment of morphinism may be summarized as follows: The process of cure or of "demorphinization" requires a degree of moral and physical courage seldom at the disposal of a morphine habitué. His abject mental state calls for firmness, gentleness, and tact on the part of the physician and the attendants. Neither the intensity of his craving nor the reality of his sufferings should be underrated or disputed. Four methods of treatment have been tried: (1) the deceptive plan; (2) the substitution plan; (3) the tapering-off plan; (4) the abrupt withdrawal plan. The deceptive and the substitution plans are not worthy of serious consideration in the management of confirmed morphinism, the latter simply handing the sufferer over from one enemy to another. Not only is the substitution of cocaine for morphine dangerous, but there is a risk of developing a cocaine habit which is worse than morphinism. As to the tapering-off plan and the abrupt withdrawal plan, there seems to be no unanimity of opinion as to which mode of treatment should be employed. The first-named plan consists in the gradual reduction of the dose until none of the drug is required. Dr. B. W. Richardson considers it better to reduce the dose at each administration than merely to lessen the number of injections in the twenty-four hours. The abrupt discontinuance of the drug is attended in all cases by indescribable sufferings, and in many by serious dangers. When morphine is suddenly cut off in those accustomed to its use, a remarkable group of severe and alarming symptoms ensue, called the *Abstinenz-symptome* or reactionary effects. These comprise acute diarrhea, insomnia, great excitement, amounting at times to mania dangerous to those around, and particularly to the physician, hallucinations, and collapse. In cases where the habit is denied or concealed Charcot relies for the diagnosis on the occurrence of the characteristic *Abstinenz-symptome* which supervene during the process of demorphinization. Great care is needed in the case of pregnant women ad-

dicted to opium, because incautious attempts to withdraw the habitual drug are, according to some authorities, almost certain to be followed by the loss of the fetus.—*Dublin Jour. of Med. Scien.*

THE USE OF ANESTHETICS IN NATURAL LABOR.—Obstetric anesthesia is quite different from surgical anesthesia, the latter being indicated for all obstetrical operations. Obstetric anesthesia may be general or local. For the former are used ether, chloroform, chloral, and a variety of mixtures, including the bromide of ethyl and the protoxide of nitrogen. Chloral can hardly be considered as a general anesthetic in the same sense as ether and chloroform. An injection of three or four grams of chloral in solution given during the period of dilatation, and repeated perhaps in four or five hours, will often prove of the greatest benefit and comfort to the patient, regulating the pains, moderating the suffering of the patient, and abbreviating the duration of labor. In the latter part of labor chloral is less useful than chloroform, this substance being now almost universally used in parturition. When it is employed only in the first stage of anesthesia no particular influence is exerted upon the contractions. If it is pushed to the second stage the contractions are retarded, but soon resume their normal rhythm. In the third stage of chloroform anesthesia the contractions are diminished, or may cease altogether. This is a stage of danger, for not only the uterus but the heart and other muscular organs may be paralyzed. The fetus experiences very little of the effect of the chloroform. The author's experience is summed up in the following propositions:

1. Chloroform given in small doses produces a condition of physical and moral calm in the patient.

2. If the inhalations are prolonged for a considerable time, the result will usually be an attenuation of the uterine pain. The perceptions of the patient become less keen, and the uterine contractions are slower.

3. If the period of complete anesthesia is reached with analgesia there is surgical and not obstetrical anesthesia.

4. In some cases chloroform excites instead of calming, and in such cases its use should be discontinued.

5. In some cases chloroform has unquestionably diminished the retractibility of the uterus, and has thus been the cause of more or less severe hemorrhage after labor.

6. Chloroform has no action upon the fetus.

7. Chloroform given during the period of expulsion has a less decided effect upon the

contractions of the abdominal muscles and the resistance of the perineum than is generally supposed. The sensation of pain at that period is not entirely abolished, the contractions are frequent, and Charpentier has failed to notice that which has been called by Campbell dissociation of the sensations of touch and pain.

Chloroform is specially indicated:

1. In primiparae who are nervous and excitable, and in whom the pain may even cause delirium; also with those in whom the labor is greatly prolonged, thus becoming a source of danger.

2. In all cases in which there is spasm, contraction, or rigidity of the neck or body of the uterus. Contra-indications are the absence of severe suffering, the existence of placenta previa, general prostration, disease of the circulatory or respiratory organs, cerebral disease, alcoholism, etc.

During the period of dilatation chloroform is most required, but only to the extent of obstetric anesthesia as a rule. It sometimes gives rise to nausea, vomiting, headache, and various nervous troubles. Hemorrhage is not likely to result unless the anesthesia is profound. Chloroform can not cause convulsions; on the contrary, it is one of the best means for relieving them. It may also be useful in warding off puerperal mania from those patients in whom the intense pain of parturition might lead to such a result. Dutertre has found reports of forty cases of sudden death during labor attributable to chloroform, but of that number thirteen should be eliminated as irrelevant. Of the others, some had cardiac or pulmonary disease, some suffered from alcoholism, and in others the narcosis was too profound. A first condition in the use of chloroform is that it should be chemically pure; death from respiratory syncope may follow the use of an impure article. Small quantities should be given, the patient being in the horizontal position, and there should be an interval between successive inhalations.—*New York Medical Journal.*

PULMONARY AUSCULTATION DON'TS.—Don't auscultate in a cold room.

Don't auscultate over the clothing.

Don't auscultate a chest before percussing it.

Don't stoop while listening to a chest.

Don't practice immediate auscultation, but select a good stethoscope and familiarize yourself with its peculiarities.

Don't forget that the hair on the chest gives rise to crackling sounds under the stethoscope.

Don't forget that your own heard or hair may do the same in any mode of auscultation.

Don't suppose that a double stethoscope is

better than a single one because it enables you to listen with both ears.

Don't forget that you can hear best with a doublestethoscope when it is held in a straight line.

Don't fail to take into account that a metallic stethoscope imparts a metallic tone to all chest sounds.

Don't buy a stethoscope in which the stem does not go through the ear piece entirely; for the stem is the principal conductor of sound, and thus insures complete continuity of material from the chest walls to the ear.

Don't lean hard on the stethoscope.

Don't allow clothing or your fingers to rub on the stethoscope while you listen.

Don't auscultate with any silk material between the patient's skin and your ear.

Don't ever omit to auscultate the apices and bases thoroughly.

Don't neglect asking your patient to cough when you are in doubt as to whether a râle is located in the alveoli or bronchi; if in the latter it will be dislodged.

Don't fail to realize that râles in one interscapular region are sometimes reflected into the opposite healthy lung through the medium of the large bronchial tubes, and that a large râle or ronchus in one of the main bronchial tubes may be transmitted over the whole or a greater part of the chest.

Don't set too high a value on a single physical sign; always endeavor to find corroborative ones.

Don't fall into the common error of believing that the crepitant râle never disappears under examination. This takes place when freshly developed crepitation is not too profuse and is subjected to repeated forced inspirations.

Don't regard a slight click at the end of inspiration, or at the beginning of expiration in an apex, as a trivial sign.

Don't forget that, as a rule, the crepitant râles at the base are more moist and crackling than at the apex, and that the latter are more resistant to treatment than the former.

Don't think, if you find a wavy or jerking respiration, that it is always a danger signal.

Don't place too much reliance on vocal resonance or bronchophony.

Don't fail, in listening for prolonged expiration, to ask your patient to breathe through his mouth. This will prevent those sounds which are produced in the nares from being transmitted into the lungs.

Don't say blowing expiration for prolonged expiration. In auscultation parlance blowing applies to inspiration.

Don't overlook the fact that cracking and crumpling râles in an apex may indicate an old dry cavity.

Don't accept the common teaching of some text books that the pitch of expiration in a cavity is always lower than that of inspiration.

Don't omit to remember that in a good-sized cavity in the left lung the heart sounds occasionally produce a metallic reverberation.

Don't conclude that, owing to the absence of well-recognized signs of disease in the chest, there exists no phthisis when wasting cough and fever persist.

Don't fail to record the physical signs and symptoms of every case you examine.—*Medical and Surgical Reporter*.

THE DISADVANTAGES OF SULPHONAL—According to Henocque (*Revue Générale de Clinique et de Thérapeutique*, January 23, 1890), sulphonal produces profound sleep, does not diminish reflex action, and is not an analgesic. A sufficiently large dose causes, in animals, death from arrested metabolism and depression of temperature. Its unquestionable hypnotic properties have been used by many alienists, who prefer it to chloral, paraldehyde, hypnone, or amylene hydrate. Italian and German physicians are particularly enthusiastic, the French less so. The latter have found it an unfaithful hypnotic in doses of fifteen to twenty grains, and that in larger amounts it causes chilliness, vomiting, diarrhea, cutaneous eruptions, stupor, or vertigo. Melancholies complain of hallucinations after its administration; hypochondriacs are depressed.—*Medical News*.

CORROSIVE SUBLIMATE FOR GRANULAR LIDS. Dr. Arnauts has obtained excellent results in curing this troublesome disease by the application of solutions of corrosive sublimate of strength somewhat greater than is used in this country. He prescribes collyria of corrosive sublimate in the proportion of one to five hundred and one to four hundred, and of this one or two drops are instilled into the eye two or three times daily. He admits that solutions having this strength excite some transient irritation of the conjunctiva, but this disappears in the course of a few minutes, and may be prevented by the antecedent instillation of a few drops of a solution of cocaine hydrochlorate. The remedy, he observes, costs little, and admits of easy application, and reabsorption of the granulations soon takes place. The effects of the solution are also well marked in causing the vascularization of the cornea to disappear. The same treatment can be adopted in cases of ulcers of the cornea, many of which will rapidly heal under the influence of perchloride of mercury solution. Dr. Arnauts records cases showing the advantages to be derived from its use.—*Annales d'Oculistique*.

The American Practitioner and News

"NEC TENUI PENNĀ."

Vol. IX. SATURDAY, MARCH 29, 1890. No. 7.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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SUPPURATION AND SEPTIC DISEASE.

The British Medical Journal of the 15th inst. makes some interesting comments upon the three lectures on Suppuration and Septic Disease delivered by Mr. Watson Cheyne at the Royal College of England in 1888. These lectures, so revised as to bring them up to date, have recently been republished in London.

First. The author makes record of some very interesting experiments whereby he has produced abscesses in animals by means of croton oil. These experiments would seem to prove that pus may exist without the presence of microbes, which makes the development of the cold abscess no longer an inexplicable phenomenon in pathology. "It is also pointed out that in true suppuration (and this is a point that is usually neglected) the peptonizing power of the products of micro-organisms plays a most important part in the digestion of the devitalized tissues." That is, when micro-organisms are present in a center of irritation pus corpuscles are formed in great number with great rapidity, and the surrounding tissue is, *pari passu*, devitalized and destroyed. When micro-organisms are not present the pus corpuscles are slowly formed, and absorbed almost as rapidly as produced.

Second. It is insisted that pathogenic mi-

crobes may be present in the body without giving rise to either suppuration or septic disease. Introduced into the blood of healthy animals, these microbes are rapidly destroyed; and thus it would seem that septicemia requires, in the implicated subject, a certain lowering of vitality (personal susceptibility) that it may do its destructive work.

This observation is in accord with the hypothesis of Metschnikoff, who believes that the leucocytes stand guard over the tissues, seizing and destroying the pathogenic microbes before they have time to reach the tissue cells; but Mr. Cheyne maintains that it is not necessary that the living micro-organisms should be taken up by the leucocytes, since digestion and destruction of these entities goes on in the blood just as well outside as within the white cells.

Prominent also among the destroyers of pathogenic microbes are the cells of the spleen and the liver. The kidney seems to have little force for the destruction of these germs, since they linger in this viscus long after they have left these other organs.

"The conditions necessary for abscess formation are impaired general vitality or diminished local vitality, and along with these there must be, practically, an embolic condition. Without these, the pyogenic organisms may remain for some time in the circulation without giving rise to any very definite symptoms. . . . An inflammatory zone acts in stopping the spread of the micro-organism. In such conditions as erysipelas, this inflammatory zone is not sufficiently rapidly formed to interfere with the spread of the organisms, and, as a result, we find that the organisms precede the inflammatory zone. . . . The other predisposing causes of suppuration are injury, irritating chemical substances, products of bacteria, and products of pyogenic organisms. . . . The conditions of age, sex, digestion, state of the blood, tissue tension, diseases, etc., have their due effect on abscess formation. Lastly, the dose and concentration of the organisms are spoken of, and we have in this portion of the lecture one of the first attempts that have been made to discuss logically and scientifically some of the biological problems associated with the virulence of infection, in connection with the

species of micro-organism and the species of animal experimented upon, the dose of the virus, the susceptibility of the tissues, mixed infection, antagonism of certain bacteria, and the like."

Notes and Queries.

LITERARY NOTE.—P. Blakiston, Son & Co., Philadelphia, publish this month a new Medical Dictionary, by George M. Gould, A. B., M. D. It is a compact one-volume book, containing several thousand new words and definitions, collected from recent medical literature, while the total number of words is beyond that in any similar book. It includes also elaborate and useful tables of the Bacilli, Leucomaines, Ptomaines, Micrococci, etc.; of the Arteries, Nerves, etc., and of the Mineral Springs of the United States, together with other collateral information.

TO SHOW THE NEED OF MEDICAL EXAMINING BOARDS FOR GRADUATES.—We copy a few of the answers given before the Minnesota State Board of Medical Examiners during their recent examination. We join expression with the Northwestern Lancet (February 15) in the statement that, "It is a pity that the general public can not carefully appreciate the important task performed by the State Medical Examining Board in shading them from such dense and dangerous ignorance as is revealed in the following quotations, copied *literatim et verbatim* from the written answers of candidates," who, without the law as it now stands, would have been let loose as practicing doctors. There are many just as ignorant now in the profession that can not be reached who must be endured until they die out. But we can prevent many ignoramuses now applying from entering the profession.

"Symptoms of edema of the glottis are that the patient feels husky and has sore throat. I would amputate it if necessary. I would do the operation within three or four months if it was a bad case."

"The dose of morphia sulph. for a child of five years, hypodermically, would be one fourth

grain, and if that doesn't give relief, I would give one half grain."

"The dose of antipyrin for a child five years old is fifteen grains every three hours."

Q. "What is an element?" A. "Earth, water, wind, fire."

Q. "Definition of Inorganic Chemistry?" A. "Chemically examining of metals or in geology for lime phosphates or any minerals."

Q. "Definition of Organic Chemistry?" A. "Of flesh, stomach, bowels, liver, or any organic matter."

"The Sterno-Cleido-Mastoid muscle takes its origin from the mastoid portion of the temporal bone, runs down the neck, and is inserted into the upper and back portion of the scapula."

"The coverings of the femoral artery is the same as of hernia, it lies between the femoral vein and sciatic nerve."

"The pulmonary artery is a branch from the great arto, fully supplying the lungs with arterial blood."

"The coverings of the femoral artery are three in number, and in Scarpa's triangle, include the vein and nerve."

"The kidney is a muscular formation, in shape oblong, color quite dark, weight about one pound to one and a half, but may vary considerable."

"Parts severed in amputation at upper third of thigh—just avoiding the insertion of the glutei muscles, passing through the Taylor's muscle, periosteum and femur."

"Coverings of oblique inguinal hernia—skin superficial fascia, transversalis muscle peritoneum and omentum."

"The sympathetic system is composed of all the filament of nerves that start from the spinal cord, and are distributed to all parts of the system, especially the brain. The cervical portion ramifies the encephalon in general. The dorsal portion ramifies the anus."

"Extra uterine pregnancy may be a fungoid growth or tumor fibroid in its character or any extra growth in the uterus would be called extra uterine pregnancy."

"A breech presentation may be known by the sense of touch, the buttox being different in formation from the cranium. The anus is different from the mouth, absence of tongue

and nose, get your finger in the inguinal region soon as possible and assist your patient by firm but gentle traction."

"Trismus neynatorum—a peculiar trouble of the eye, generally congenital, falling of the lids giving a unnatural look to the ordinary face of a child."

Q. "Tests for Arsenic." A. "Separate the juices or secretions in the stomach and evaporate the aqueous portion and the test precipitate with acids."

Another writes, "Don't know any thing about it. Such a stomach would be sent to a chemist at the present day."

Q. "Give the distinctive histological features of carcinoma." A. "Carcinoma will show a general dropsical condition. Transparent condition of all the fluids except the urine which may show considerable deposit, scanty, and hot. The patient's pulse, heavy, large, does not care to move."

"Tubercle of the lung is supposed cause of consumption and the one generally advocated and preventive treatment is any that will burn up them or destroy them I am a believer in alcohol but the way and its action I am unable to give."

Q. "Test for arsenic in wall paper." A. "Don't know; if I should happen to have a case where it was necessary I should look it up. I know it is to burn something in a room and the fumes will turn the paper green."

Q. "How would you tell Sulph. Morphia from Sulph. Quinia?" A. "Sulph. Quinia is white, flaky, glistening. Has a metallic look. Tastes bitter. Never saw any pure Sulph. Morphia in my life. Have no use for either."—*Virginia Medical Monthly*.

THE HISTORY OF MODERN MEDICINE IN JAPAN.—Dr. S. Nagayo, Director of the Sanitary Bureau in Tokio, recently delivered a very interesting address before the medical society of that city, in which he gave a history of the introduction and growth of Western ideas of medical practice in Japan (*Sei-I-Kwai Medica' Journal*, December, 1889). Although some Spanish physicians appeared in Japan over three hundred years ago and instructed some of the natives in the healing art as it was

practiced in Europe at that day; yet, when the persecutions of the Christians began, what little knowledge had been acquired speedily became traditional merely and was practically lost. About the year 1750 a native of Japan, Dr. Rankwa Maeno, became interested in the methods employed by the foreign physicians in the treaty ports, and learned the Dutch language in order to study the books in which this knowledge was contained. It is he that may justly be called the father of Western medicine in the East. He soon gathered around him a number of men who were eager in their study of Dutch, and employed their knowledge of the language in translating all the books on medical topics that they could procure. As an illustration of the perseverance of these pioneers in this branch of study it is said that they were able to translate only one or two lines of a medical book in an evening, yet such was their diligence that ten large volumes of translations were published within a few years.

The first modern hospital was established about thirty years ago, and with it was begun a school where both didactic and clinical instructions were given. The leaders in this were Drs. Pompey, a Dutchman, and Matsumoto, a native. Instructions were given continuously in this school, but it was difficult to get students to attend with regularity, many of them coming for short periods only, and apparently with the design merely of copying some of the prescriptions rather than of grounding themselves in the science of medicine.

It was not until after the revolution in 1868 that medicine began to make any real and satisfactory advance, but when once it started fairly its progress was most satisfactory. At this time the military hospital at Yokohama was removed to Tokio, and the medical school was established there, many of the teachers being foreigners. A few years later the course of studies was graded, and the beginning was made of the medical department of the university. From this time the progress of modern medicine in the country was very rapid, the number of students increasing from year to year, and the proportion of physicians who practiced according to the new methods becoming constantly greater. So striking, indeed, is

this marvelous progress that we may well pardon the little conceit with which Dr. Nagayo closes his address, when he predicts that it is reserved for the physicians in Japan to unravel the truths of creation, and open to the world the gate of this great mystery.—*N. Y. Med. Record*.

SIMPLICITY THE SEAL OF TRUTH.—Dr. Robert Koch, in the minds of many the foremost scientist and physician of living Germans, is in manner of life the personification of simplicity. His demeanor is said to be so plain and free from self-assertion that, by comparison with him, certain others of his *confrères* of the Berlin profession appear haughty and unapproachable. As an illustration of Dr. Koch's habits, it is said that when he travels he is quite as apt to be found taking a third-class railway ticket as any other, while the majority of his students would consider their dignity compromised by any thing less than a second class passage. In other matters as well are indicated attributes of mind and character which place him in the right line of descent from the great Boerhaave, whose favorite motto was "*Simplex sigillum veri*." And this is the legend that is graven on his monument in the St. Peter's church at Leyden by her grateful citizens—a fact which has put in the mouths of thousands the admirable sentiment, "simplicity is the seal of truth," hundreds of whom have probably dwelt but lightly on their debt to the great professional talents of him whose life was squared to that rule. Simplicity is the trait of the master, while the lack of it seems entirely natural to the novice. As it is the single flower that produces the seed, while the double one beside it perishes with its beauty, so there is that singleness of purpose and simplicity of method that bear the fruit of life-saving discoveries, such as the genius of Boerhaave gave to his generation, and such as Koch's labors promise to yield in surpassing measure.—*Jour. Amer. Med. Association*.

EFFECT OF INFLUENZA ON THE MORTALITY OF THE STATE OF NEW YORK DURING JANUARY.—The reports of the New York State Board of Health show that the number of

deaths in that State during the month of January was nearly 5,000 greater than the average for this month in the past five years, the mortality being greater by 2,000 than that for July, the most fatal month in the year. The marked increase is due to the occurrence of epidemic influenza, which began in December. While but a few hundred deaths are attributed to this cause directly, its influence on the mortality of other affections was very great.

Acute respiratory diseases are given as the cause of three times as many deaths as the average in January, and phthisis showed an increase of 70 per cent in mortality, while in nervous, circulatory, and digestive diseases the death rate increased from 37 to 40 per cent. On the other hand, the number of deaths due to zymotic diseases was less by 340 than in January, 1889, and the percentage of deaths of children under five years of age was less by about one half. Of the cities in the State, Albany shows the greatest death-rate, 41.12. New York's rate was 34.44, and Brooklyn's 29.72. The largest death-rate in the State was in the town of New Rochelle, Westchester County, namely, 52.—*Boston Med. and Surg. Journal*.

AMERICAN and English physicians resident in France, or who may live for any length of time in that country, will be interested in a bill recently laid before the Chamber of Deputies by M. Chevandier, of the Drome. That bill, which will soon come into discussion, provides for new regulations in regard to the licensing of native physicians, and also in regard to the admission to practice in France of foreign doctors. The second proposition in M. Chevandier's bill relates to the conditions to be required from foreign doctors previously to allowing them to practice in France. The rule was, formerly, that a foreign doctor having his diploma from a foreign medical university, school, or faculty, could practice in France, provided he should be allowed to do so by the government, which sometimes granted the said permit to be issued, on a mere application, by the Minister of Foreign Affairs. The new bill requires that such permits shall be granted hereafter only after the foreign applicant shall have passed successfully through an examination before a

French "Faculty of Medicine," on the same conditions as those imposed on the French medical students. In fact, M. Chevandier's bill considers as naught the diplomas obtained from foreign faculties.

A CONFERENCE FOR REFORM IN MEDICAL TEACHING.—The following circular is signed by all the six Maryland schools, and is to be sent to all the medical schools of the country: *To the Medical Colleges of the United States:*

The following Baltimore medical colleges and the Johns Hopkins Hospital, having met for the consideration of reforms urgently needed in the system of medical education hitherto in operation in this country, after a full discussion of this most important subject, have come to the conclusion that it is not expedient, nor, indeed, practical, for the medical schools of any State to assume alone the responsibility of adopting advanced methods; yet, fully convinced of the pressing need of a change, and earnestly desirous to see it consummated, they are unwilling to let matters rest longer as they are, without at least an effort on their part to improve them. They have determined, therefore, to issue this appeal to the medical schools of the United States for their co-operation in inaugurating a national advance. Fully aware of previous ineffectual efforts in this direction, they yet realize that times have greatly changed since these efforts were made, and they believe that a repetition of them at this time would have a good prospect of success. The approaching meeting of the American Medical Association, drawing delegates, as it will, from every part of the country, offers a good opportunity for convening those who are interested in the contemplated change. We therefore invite you to join with us in holding a conference for the full consideration of "medical education in this country and measures for its improvement," and we request that you will appoint, at your earliest convenience, one or more delegates from your faculty to represent it at a meeting to be held at Nashville, Tenn., on the 21st of May, 1890, at 3 P. M. It is requested that delegates should be instructed, as far as possible, as regards the wishes of their faculties upon the various

measures now proposed in connection with advances in medical instruction, in order that definite results may be arrived at with the least possible delay and trouble. The following subjects are considered as most likely to come up for discussion:

1. Three years' course of six months' sessions.
2. Graded curriculum.
3. Written and oral examinations.
4. Preliminary examinations in English.
5. Laboratory instructions in chemistry, histology, and pathology.

THE ELIMINATION BY THE STOMACH OF MORPHINE INJECTED SUBCUTANEOUSLY.—The *Therapeutic Gazette* quotes from a paper published by Dr. Alt, in the *Berliner Klin. Wochenschrift*, No. 40, 1889, in which is found an explanation of the cause of the nausea and vomiting which in so many cases follow the subcutaneous administration of morphine, and a practical point is indicated for the relief of this complication in grave cases. The author has found that when morphine is injected subcutaneously it is eliminated through the mucous membrane of the stomach, and that this elimination commences two minutes after the injection, continues for nearly half an hour, and ceases at the end of about fifty or sixty minutes. The nauseating effect of subcutaneous injections of morphine are attributable to this gastric elimination of the alkaloid, and the emetic effect co-exists with the elimination of the morphine by the stomach, or, at least, never precedes it. Dr. Alt finds that washing out the stomach entirely prevents the production of nausea, a point which may be of value when rebellious vomiting follows the administration of this hypnotic. The quantity of morphine which is eliminated by the gastric mucous membrane is relatively large, and may amount to even half of the total amount injected beneath the skin. The author further finds that, when washing out the stomach is performed after each injection of morphine, there is produced great attenuation in the toxic effects of this alkaloid, and that then doses, which under other circumstances would be inevitably fatal, are found to be administered

without danger. It should be mentioned that, although the author's conclusions are deduced from experimental results obtained upon dogs, similar experiments made upon man sufficed to affirm the reliability of these conclusions.

ACCORDING to a Lynn daily paper, a "Dr. E. F. Adams," of that city, was detected some time since as being in possession of a medical diploma from the Medical School of Maine, which diploma the Secretary of that Faculty was able to assert had not been issued to the person who was using it, and which was at once surrendered to the secretary on his demanding it back. The person who was practicing under that diploma is now announced to have in his office a diploma of the "Vermont Medical College," dated March 9, 1889, and signed by "Moses E. Cheney, M. D., President, and George Dalton, M. D., Scribe."—*Boston Medical and Surgical Journal*.

THE New York Herald makes a little quiet fun over the medical intelligence which is cabled over. The latest scheme thus exploited is that of Dr. Bapahinshi, of St. Petersburg, who claims that diphtheria can be cured by inoculating the patient with erysipelas.

"In confirmation of the soundness of the suggested system of treatment, says our contemporary, the experts refer to many analogous facts. They cite one case in which a man who had suffered grievously with corns contracted typhus fever and was never again heard to complain of the least pain in his toes. His apartments were carefully disinfected after the funeral, so that no harm was done to others by the treatment.

"Again, our ambulance surgeons have observed that a single contusion on the head, made by a policeman's club, often acts as a perfect and permanent anodyne in cases of alcoholic insomnia and the like, and the instances are known in which confirmed dyspepsia has been permanently relieved by the patient's becoming intermingled, as it were, with the accentuations of a buzz-saw.

"In the southern and western parts of our country this system of counter-irritant treatment has been practiced with marked success

in obscure forms of mental malady. Hippokleptomania—or the irresistible desire for other people's horses—has been completely cured by hypodermic injections of metallic lead in pellets thirty-two to the pound.

"In the mining regions of the far West, according to records published by Dr. Bret Harte and other observers, undue irascibility of temperament and even skepticism as to the accuracy of other people's statements have been successfully treated in the same way."—*Ibid*.

THE Brooklyn Eagle thinks that "the American students at Berlin must keenly feel their position. But what are they to do? Privy Counselor Klueffel is perfectly correct when he says that we have 'institutions of real worth established side by side with those that are practically humbugs,' and that 'the laxity of American laws and regulations concerning the conferring of degrees is remarkable.' Brooklyn, we may note in this relation, has a medical college of very fair standing; there are two in New York, there is one in Philadelphia and another at Harvard, and there may be a few elsewhere; but, as compared with the 'quack colleges,' they are as rare as violet in January. To some extent the evil may be attributed, perhaps, to the rapid development of the country and to a less exalted notion of the responsibilities of professional duty than prevails abroad; but whatever the explanation, the subject is surely one which deserves to be honestly discussed, in the hope of providing an adequate remedy."

On the other hand, the teachers connected with post-graduate schools and polyclinics in our own large cities do not seem to be afflicted by the action of the Berlin authorities. These gentlemen are quite willing that American students should study at home, and are ready to furnish every facility. It is probably true that many of those who go abroad to study would learn more medicine in the same time if they stayed at home.

CEREBRAL LOCALIZATION.—A very successful result in brain surgery was recently obtained at the Roosevelt Hospital by Dr. Charles Mc-

Burney. The patient was a physician of Rochester, Dr. Clark, who last summer, by an accident, received an injury of the head which caused aphasia and paralysis of the right side of the body. After a time the use of the affected upper and lower extremities was partially recovered, but the aphasia continued complete, and he was brought to New York for treatment. With the assistance of Dr. Wm. Allan Starr, the neurologist, the seat of the trouble in the brain was located, and the skull was trephined by Dr. McBurney. A clot was found and removed, with the result of restoring complete power to the arm and leg and a partial restoration of the power of articulation, and there now seems to be every prospect of a perfect recovery of this function.

TRANSMISSION OF PHTHISIS IN MARRIED LIFE.—M. Leudet has occupied himself with collecting some statistics on the question of whether a wife can give phthisis to her husband, or a husband to his wife. He has taken one hundred and twelve widows or widowers whose husbands or wives respectively have died in undoubted phthisis. Out of these seven were phthisical; but several of them had facts in their previous history, before marriage, showing a phthisical tendency. His inference was, therefore, that the transmission of phthisis in married life must be very rare; even more rare in the upper classes than in the middle and lower. In eighty out of these one hundred and twelve cases there was a family history which he could follow, and twenty-seven of these showed some members who were phthisical.—*Le Progrès Méd.*

EPIDEMIC OF CHANCRIFORM VACCINIA.—A correspondent writing from France to the Archives of Pediatrics says that a very curious epidemic of vaccine of an ecchymato-ulcerous nature took place at a small place called Motte Sous Bois, in the north of France lately. A large number of children had been vaccinated from a child, and soon afterward they presented certain ulcerations of a herpetic nature on the arm vaccinated, as large as a ten-cent piece; nearly forty children were affected. With this the arm was swollen and edematous,

and the suppuration was abundant; some of these ulcers got as large as a half dollar piece, and were pronounced to be syphilitic by some of the observers. Prof. Leloir, however, insisted on waiting to see if there would be secondary symptoms, and after three months all healed up without the slightest signs of secondary syphilis; and he was able to read a lesson to the too rapid diagnosticians who pronounced it syphilis, which from vaccination should never be diagnosticated until the secondary symptoms come on.

THE DISPENSARY ABUSE IN BALTIMORE.—New York is not the only city that suffers from this evil, and now the physicians of Baltimore are complaining of the inroads made upon their practice by the dispensaries. The Johns Hopkins Hospital Dispensary is especially obnoxious to the medical residents in the northeastern part of the city, and it is charged that no discrimination is made against well-to-do patients, a large number of these received and treated being amply able to pay good fees for medical attendance were they compelled to do so. The dentists of the city are also beginning to find fault with the dispensaries on account of the looseness with which they dispense their charity, and a meeting of practicing dentists was held recently to protest against the abuse and to take measures for its correction.—*N. Y. Med. Recrd.*

A SCHOOL FOR STUDYING LUNACY.—The London County Council has decided to erect a hospital, not for the storage of lunatics, but for the treatment of psychological disease and the instruction of specialists therein. There will be a staff of skilled experts, and the Council is prepared to spend \$10,000 a year on it.

DR MACKENZIE'S SUCCESSES IN THE COURTS. Sir Morrell Mackenzie has won another libel suit, as we are informed by the cablegram, the *St. James Gazette* having been mulcted to the extent of \$7,500, or just ten times the sum that the *London Times* had to contribute to his solacing, as the result of a similar suit. Dr. Mackenzie has been fortunate both at Court and in the courts.

MARK TWAIN, in the February number of *Harpers' Magazine*, entertains his readers with some accounts of former medical nostrums, which can be paralleled in the library of many a physician of historical tastes. He quotes largely from an old book called "A Dictionary of Medicine," printed in 1745. He says it was captured by Northern troops in 1861, in Virginia, where it was still believed in and followed. Here is an extract:

"A certain merchant about forty Years of Age, of a Melancholic Habit, and deeply involved in the Cares of the World, was, during the Dog-days, seiz'd with a violent pain of his Head, which some time after oblig'd him to keep his Bed. I, being call'd, order'd Venesection in the Arms, the Application of Leeches to the Vessels of his Nostrils, Forehead, and Temples, as also to those behind his Ears; I likewise prescrib'd the Application of Cupping-glasses, with Scarification to his Back: But, notwithstanding these Precautions, he dy'd."

Whereupon Mr. Clemens remarks: "Now that we know what the physician did when he wanted to relieve a headache, it is no trouble to infer that if he wanted to comfort a man that had the stomach-ache he disemboweled him."—*Boston Med. and Surg. Journal*.

DR. REGNARD has raised the question, says the *Bristol Medical Journal*, as to whether a corpse which sinks to a very great depth is preserved indefinitely or otherwise from putrefaction. According to his researches, published in the archives of the Biological Society of Paris, putrefaction does not take place in decomposable substances submitted to a pressure of 600 to 700 atmospheres. These figures correspond to a depth of 6,000 or 7,000 meters at sea. From these experiments it must be concluded, according to Dr. Regnard, that there is a total absence of putrefaction in the greater depths of the sea. The curious "abysmal" fishes, discovered in the Challenger and other expeditions, appear to rise after death, so that they are sometimes found on the surface, though, as a rule, they go to pieces as the surrounding pressure diminishes, long before they reach the air. Still, there is no proof that bathybial or abyssmal micro-

organisms do not exist, and, if so, they could cause decomposition in the corpses of men as well as in the dead bodies of abysmal fishes. The question is of considerable medico-legal, and yet greater biological interest, and it is far from settled.

AN Emergency Hospital has been provided at Denver, Col., by the members of a voluntary society known as the Associated Charities. For the time being the hospital will be located at a house which has been rented for its use.

SPECIAL NOTICES.

J. M. RITTER, M. D., Richmond, Ia., says: My experience with S. H. Kennedy's Extract of *Pinus Canadensis* has been highly satisfactory, especially in the treatment of gonorrhea and gleet. In these lesions I regard S. H. Kennedy's Extract of *Pinus Canadensis* as the remedy par excellence. In one obstinate case of gleet, particularly, I obtained the very best results from the remedy as an injection; the case was of six months' standing; the patient had consulted other physicians, but with negative results. I prescribed the *Pinus Canadensis* (White) as an injection, properly diluted. The malady yielded immediately, the discharge lessened, and finally yielded entirely, to the great delight of the patient.

LILLY'S IMPROVED GLYCERIN SUPPOSITORIES CONTAINING NINETY-FIVE PER CENT GLYCERIN.—"These invaluable peristaltic persuaders are prepared in a most excellent and improved manner by Messrs. Lilly & Co., of Indianapolis. Their suppositories contain 95 per cent of glycerin, and a beauty of their construction is the peculiar waterproof covering of each suppository, which is readily and easily removed. By simply pressing upon or slightly squeezing the suppository between the fingers it slips out with astonishing ease, leaving the covering between the fingers. A great improvement, as any one will readily recognize who has ever made the effort to divest one of the ordinary suppositories from its lead foil and tissue paper envelope."—*Southern Practitioner*, October, 1889.

The original imported Hoff's Malt Extract (Tarrant's) is the only Malt that ever received an award of merit in Germany. It received the Bronze Medal at the Hamburg Exhibition last year, and was awarded the first order of merit (a Silver Medal), at Melbourne, Australia.

To prevent substitution specify "Tarrant's" when prescribing Hoff's Malt.

MCARTHUR'S Syrup is mixed, like the painter's colors, with brains. See the excellent reasoning in their advertisement, and delay not in adopting the remedy in your practice.

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THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., APRIL 12, 1890.

No. 8.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

PERTUSSIS AND ITS TREATMENT.*

BY J. F. PURDOM, M. D.

The subject of whooping-cough is necessarily one of importance.

First, because all children are liable to contract it, and the greater number of the human family do have the disease at some period in life, the vast majority of cases occurring in infancy or childhood.

Second, because of the liability to serious complications that may arise in any case, which may prove fatal, or leave behind results from which the patient may never fully recover. And in the third place, because those complications by judicious treatment may be prevented and the patient restored to vigorous health.

It is not necessary that I should enter into the history of the disease or mention its symptomatology. As to the etiology of the disease, it needs no discussion. That it is produced by a micro-organism and contracted by contact with those suffering with the disease is an accepted fact. Our means of prevention is expressed in one word, *isolation*, for we are scarcely able to carry out any effective means of destroying the micro-organism, the only source of contagion.

As to its pathology, investigators have failed to find any special lesion *post-mortem* that would be characteristic of the disease *per se*, as deaths from uncomplicated cases are almost unknown; consequently we are left to draw our

conclusions with reference to pathology from clinical study. Observers are, so far, not agreed as to the particular pathological anatomy of the disease from any standpoint whatever that would enable us to understand just why pertussis runs a particular course through a catarrhal stage, a spasmodic stage, and a stage of decline to perfect recovery when uncomplicated or uninfluenced by treatment.

It is obvious that the established fact of the micro-organism being the cause of whooping-cough has added but little, if any thing, to our knowledge of the pathological conditions existing during the course of the disease.

We are not prepared to believe that the spasmodic stage depends alone in its severity upon the number of germs existing in the mucous membranes involved; for, if so, why should the spasmodic cough be less severe when complicated by pneumonia, at which time micro-organisms are very much increased in number.

But we are led to conclude that the cough in its severity is governed by the amount of irritation, reflex in character, that is conveyed to the nervous centers controlling the muscles of respiration and what would be called the cough center. So we believe the most important pathological condition existing to be congestion of the medulla oblongata or its membranes. And we believe, further, that all internal medication that effects the disease favorably does so by reducing that congestion or by its narcotic effect. It is desirable to make as early a diagnosis as possible; but in an isolated case, without a history of exposure to contagion, it is practically impossible for the doctor to make a positive diagnosis until the disease is fairly developed.

As to treatment, I have as much faith in the use of remedies given with a view to prevent complications, to render the spasmodic stage

*Read before the Boyle County Medical Society, February 5, 1890.

mild, and abridge the duration of whooping-cough, as I have in the use of remedies in any disease we can not possibly abort.

To mention all the remedies that have been used in the treatment of the disease would be a waste of time; but a review of a few of the drugs that have enjoyed the greatest amount of favor with the profession will, I think, show that the therapeutic action in every case was either local, and thereby relieved the tendency to reflex disturbance, or systemic, and relieved the symptoms by their sedative effect upon the irritated nervous centers.

It was a fortunate day for children, born and unborn, when men learned that emetics were not indicated in the treatment of the disease in question. The child will vomit often enough without an emetic. It was very natural for belladonna to become a popular remedy, owing to its narcotic effect combined with the property of lessening the secretion of the mucous surfaces involved in whooping-cough; but belladonna and its alkaloid, atropia, are powerful drugs, and I never prescribe them to children without feeling the necessity of great caution. I am not surprised that Brown-Séquard concluded he had found the elixir of life, for a man that could make up his mind to give to the infant or young child sufficient atropia to produce and maintain delirium for three days to cure whooping-cough would certainly be capable of arriving at almost any conclusion. Neither was it remarkable for the bromides and chloral to take a high place in the therapeutics of pertussis as soon as their sedative effect on the nervous system was known, as the etiology of the disease was then still a question, as in the days of assafetida, cochineal, and garlic. However, if there be an excessive nervousness indicating the probability of convulsions, or unusual restlessness at night, the bromides and chloral hydrate are specially indicated to tranquilize the nervous system and promote sleep, but not with a view of effecting directly the course of the disease.

Antipyrin certainly would control the nervous element to some extent, but, as I believe, only by its sedative influence on the nervous centers, acting in the same way as the bromide of potassium does in producing whatever

favorable result it may have; but it is a fact that antipyrin is a drug too powerful to be used indiscriminately with children or even adults. Although many cases have been reported as treated favorably with antipyrin without the evidence of collapse, still there is nothing in those reports to encourage me to accept it as the most suitable remedy to be employed, or even to think of it as a favorable prescription.

The only benefit to be derived from the internal use of quinine I believe to be its ability to equalize nervous force and act as a tonic; but the difficulty of giving it to young children, and its liability to provoke vomiting, I think counteracts the benefit therefrom, except when the disease is complicated by excessive bronchitis or pneumonia. It would appear, from the etiology of the disease, that the remedy would not be far to seek; but unfortunately we are disappointed in so called specifics based upon germicidal properties. When we consider the location of the micro-organism in pertussis we are not surprised that we can not destroy it by local remedies; for, in the first place, they do not remain on the surface to be washed off by a gargle, or to be killed or even rendered inactive by a germicide used with a spray, nor by the insufflation of an antiseptic powder; but before treatment is called for, during the incubative stage, the enemy has been hiding at least a part of his army in the tissue proper, and is out of reach of all our local remedies. In the second place, if it was possible to destroy the micro-organisms by the continued use of the steam atomizer, the spray, and various other means of applying the germicide, we would still be unable to accomplish our purpose, for it is practically impossible to carry out such a course of treatment with infants and young children.

The laryngeal insufflation of quinine in fine powder, as used by Litznerich, Mitchell, and Forcheimer, certainly, according to their reports, makes a good showing, but like the painting of the larynx with a brush, and the daily application of resorcine to the opening of the glottis with a probang, as practiced by Moncorvo, is impracticable in private practice.

Nasal insufflation would seem to have some advantage as to simplicity, and in some cases might perhaps be carried out by the parents.

But in the use of germicidal agents in the treatment of whooping-cough there are several things to be taken into account: (1) What drug is destructive to the particular germ; (2) what strength of solution is required; (3) under what conditions of isolation or admixture with the secretions will it work; (4) what length of time the application should be made to destroy the germs while in contact with the living tissue; (5) how often must it be applied to destroy the micro-organisms that are being developed in the tissue involved and making their way to the surface; (6) if it is possible to accomplish our object without incurring the risk of producing a more serious condition than the one we are attempting to relieve. I must say that I have so far found nothing in the local application of remedies or the fumigating of sulphur to encourage me to persist in their use. Forcing young children to submit to any form of local treatment of the nasal cavities or the throat is too difficult and disturbing to be justifiable in the treatment of whooping-cough, until the effects prove to be more than palliative; for we can take of the old remedies and do as much in a more agreeable way by internal treatment. I do not attempt any more to use any form of atomizer, or to paint the throat or even give nasal insufflation, because they can not be carried out in private practice, though reports of their use may look well on paper.

Owing to the fact that we are not able to abort pertussis, it occurs to me that the most rational line of treatment we can adopt is that which can be carried out in all cases with the greatest amount of convenience and safety of administration; provided we can obtain thereby favorable results equal to those derived from the use of more dangerous drugs, heroic treatment, or more troublesome forms of administration. And while I have no new remedy to offer in the treatment of the disease, I wish to give my experience with an old drug, the use of which has been and is yet based upon my idea of the pathology of whooping-cough.

The fact being established that pertussis is caused by a specific germ which confines itself to the nasal, throat, and respiratory mucous membranes, has not changed in my opinion the fitness of the internal treatment which I have

used during the past eight years. The drug which I employ is ergot. I find ergot mentioned by several writers, but the amount given and the frequency of the dose I have not seen stated, neither have I seen mentioned the object to be attained by its use.

When I have diagnosed the case I prescribe fl. ext. ergot, given in wine or brandy, if objected to in water, every two to four hours, according to the severity of the symptoms; to a child of three months, five-drop doses, and to older children in proportion to age; and, as the urgent symptoms abate, I lessen the dose or extend the time, but continue the ergot until the spasmodic cough has ceased. My confidence in the curative effect of ergot is so settled that I tell the parents that so sure as they give the medicine as directed they will find improvement in the spasmodic cough inside of seventy-two hours. As a palliative in the early stage, I give in conjunction with the ergot a simple cough mixture composed of equal parts syr. ipecac, syr. squills, camphorated tinc. opium, and aromatic spts. ammon., with double the part of syr. tolu; dose according to age, and repeated as necessary to relieve the tenacity of the mucus and give rest at night. I regard it necessary as far as possible to have proper ventilation of the living apartments, with out-door exercise when the weather will permit. The feet should be kept dry and the body clothed with flannel during the course of the disease at all seasons, except the hot months of summer.

With a good, generous diet, I recommend all such hygienic measures as would tend to promote vigorous health. As will be at once seen, I do not claim any specific action for ergot, but believe it relieves congestion of the vessels about the medulla oblongata; also constricting the vessels of the parts invaded by the micro organism; making the soil less fertile and the tenacious secretions less abundant, thereby making the enemy's stay of shorter duration, and at the same time cutting off his avenues for producing complications by lessening reflex irritability.

I have treated one hundred and three cases of whooping-cough with ergot and a simple cough mixture, and without a death. I have

had neither capillary bronchitis, pneumonia, nor convulsions to arise after treatment was begun. Neither has there been any hemorrhage worthy of note. The spasmodic cough has lasted from seven days to four weeks; and there has been seldom a tonic course of treatment required in the stage of decline, as a result of anemia or retarded convalescence.

MITCHELLSBURG, KY.

A CONSIDERATION OF SEXUAL NEURASTHENIA.*

BY BRANSFORD LEWIS, M. D.

In the present paper, without going into the subject to any exhaustive extent, I wish to call attention to an erroneous impression that has become widely prevalent of late years—although this error is probably an almost legitimate result of the reaction from an error that was just as widespread, and perhaps even more deplorable than the one to which I refer.

In 1836 Lallemand presented his work on spermatorrhea, in which he depicted in true French style the disastrous results and almost universal prevalence of this disease among men who had formerly practiced masturbation; the horrors of lost manhood, physical and mental debility and decay, and broken constitutions were dwelt upon in a manner that was calculated to awaken very uncomfortable feelings in those who had abused themselves in this way. Quacks and charlatans were not slow in grasping the opportunity afforded by such authoritative backing to the prickings of natural fear and guilty consciences. These views were adopted far and wide.

Like the wheels of justice, the march of science is sometimes slow, so that there was a considerable lapse of time before the general profession began to appreciate the seriousness of the error of this fanatic belief. But finally it was recognized; the extreme views of Lallemand and his followers were combated, refuted, and condemned. But, pendulum-like, the profession did not stop at a happy medium; it has gone further, and is now quite generally under the impression that the condition of

spermatorrhea is a rare one—in fact, almost never occurs, according to some teachers of the present day. It is held by these to be wholly the product of an imagination which has been stirred into creative activity by the help of quack advertisements, marriage guides, etc. And its near cousin, impotence, is said to be dependent, in the vast majority of cases, on an analogous state, mental cowardice, want of mental stamina, or rather a doubting of one's ability to perform the sexual act successfully. At any rate, the general tendency of the profession at the present time is to throw the blame on some purely mental or psychical deficiency. Hammond has written a book in this strain. I have heard learned discourses in which spermatorrhea and genuine impotence were almost denied the right of existence at all. It has not been "good form" to believe it possible for a man to have spermatorrhea. And why? Because, forsooth—because our dominating authorities have condemned the term, have ostracized it, until one is almost ashamed to be caught making a microscopical examination of urine for evidence of spermatorrhea.

The treatment offered for these conditions, based on such one-sided views, naturally can not be very elaborate; it is beautiful in its simplicity, yet cheerless in its monotony. It consists mainly in arguing the patient out of his trouble. If he claims to be impotent, he is told to go along and not be imagining such things; that he is a perfectly healthy and strong man, and *prima facie* evidence would confute his statement. If he asserts that after urinating or defecating a semen-like substance exudes from his urethra, and he is much frightened lest he be affected with spermatorrhea, he is sat upon so hard by his doubting and deriding Thomas of a medical attendant that he does not soon venture such a ridiculous proposition again. But he is immediately inducted into the mysteries of hypochondriasis, and is taught the baleful effects of reading quack advertisements, and is advised to quit both as he would the morphine habit, to live a virtuous life and brood no more over his trouble, and that all will come out right in the end.

*Read before the Medical Society of the Missouri Valley, at St. Joseph, March 28, 1890.

At the risk of coming in conflict with the dicta of authorities, I wish to express my humble belief that these conditions, and especially spermatorrhea, are not of such infrequent occurrence as literature and the prevalent teachings would indicate. And, impressed as I have been for some time in this way, I was much pleased, not long since, by coming across these words from the pen of Dr. Geo. M. Beard (*Sexual Neurasthenia*): "True spermatorrhea—the flowing away of spermatic fluid in the urine or after stool—is a very frequent symptom in all kinds of neurasthenic as well as in many other debilitating diseases; and therefore the common and almost universal belief of the profession, taught in text-books and lecture rooms, and reiterated without doubting or inquiry in consultation and conversation, that it is an exceedingly rare condition, is a delusion that is demonstrably false to any one who knows how to examine urine and takes time to do so."

A similar state of affairs has existed with reference to the female sex. Formerly all the backaches, the head pains, the peculiar sensations, insomnia, etc., in women were interpreted as being but manifestations of that ubiquitous malady, hysteria. That was the fashion a half century ago. Now no one would think of pronouncing any such case to be hysteria until a thorough and complete examination of the uro-genital system had been made; and even then he would be very chary about making such a diagnosis pure and simple, for fear that some more acute observer might come across the patient and discover the hidden secret of the disease. The influence of the ovaries, uterus, tubes, and other pelvic organs of woman on her general condition, both mental and physical, is becoming better understood every day, and we now hear less of hysteria and more of distinct pathological changes in those organs. And observation has taught me that where a man is making the complaint, instead of a woman, there are just as good grounds for suspecting some tangible basis for such a complaint as there are in the woman detailing the symptoms mentioned.

So I believe that, on the same grounds, we should begin to hear less of hypochondria (the

prototype in man of hysteria in woman), and more of appreciable morbid entities.

But, you ask, what has this to do with sexual neurasthenia?

In answer, I will invite your attention to neurasthenia in general. Dr. Beard, who has perhaps developed this subject more fully than any other English writer, defines neurasthenia as being "a chronic functional disease of the nervous system, the basis of which is impoverishment of nerve force, deficiency of reserve, with liability to quick exhaustion, and a necessity for frequent supplies of force; hence the lack of controlling powers, physical and mental, and the excessive sensitiveness and irritability, local and general, and the vast variety of symptoms, direct and reflex. 'Nervousness' that arises from such an origin is really nervelessness."

The "governor" has been blown from the engine; the steady-eyed, firm-voiced captain is gone from the sinking ship; confusion reigns supreme.

That, then, is neurasthenia, and it arises from many causes—as a general rule, from chronic abuse or irritation of some one of the nervous centers of the organism, of which the cerebrum, the digestive system, and the genital system are the principal ones. And the particular locality from which the disturbance springs determines the particular kind of neurasthenia present in a given case; in this way we speak of cerebral neurasthenia, digestive neurasthenia, or sexual neurasthenia. There are still other centers for the determination of this affection, such as the eye, ear, rectum, etc., but the ones to which I have alluded most often deserve the blame.

All cases of neurasthenia are more or less analogous, in that they consist in this systemic nervous deficiency, the result of and combined with irritation of some local point, the perturbing influences of this irritated focus being telegraphed back and forth throughout the organism by means of the sympathetic, the motor and sensory, and the vaso-motor nerves. The whole constitution naturally becomes more and more deranged, and the general nervelessness more and more pronounced the longer such a state of affairs continues; and finally,

although the local defect which had initiated the long train of symptoms be remedied, the constitutional *habit* of derangement has become so firmly fixed that the cure is not an immediate result. The system must therefore be attended to as well. The rational treatment then stands out with self-assertive prominence; it must be directed toward healing the local and renovating the general deranged action.

Now, confining our attention more particularly to the subject indicated by the title—our text, so to speak—let us inquire how the sexual apparatus shows its malevolence in the way that I have indicated? Of adherent or redundant prepuce, wide stricture, narrow meatus, phimosis, etc., we hear much, and consequently any such conditions would be very liable to be discovered, and their correction would probably be the first aim of the general run of physicians at the present day. But there is a condition less readily discovered, and to which comparatively little attention is paid, and yet it is one which is probably even more widely prevalent than any of these. I refer to a chronic congestion, hyperexcitability and overloaded condition of the prostate gland and the urethral mucous membrane lining it. This is the “sensitive area” of the genital apparatus in man, the most abundantly supplied with nerves, that connect intimately with the neighboring organs and with the spinal cord; and it is no wonder, then, that an abnormal condition of this area is capable of bringing about reflex irritations in other parts of the economy. Action and reaction between such a local condition and the general system come into play as naturally as they do between body and mind.

A case from my note-book may serve as a clinical instance of the kind of case to which I refer, especially as it is almost classical as a type of sexual neurasthenia.

J. W., aged twenty-five years, American, clerk. No hereditary history of nervous troubles. Prior to the beginning of the present affection the patient was healthy, though not especially robust. At the age of fourteen he began the habit of masturbation, performing it every day for probably a year and a half. He then began to have intercourse with

women, and on this account ceased masturbating. He had intercourse about three times a week for the next six months, when he first began to observe the symptoms of the present affection.

These are so numerous that I shall not dwell on each one in the linked sweetness-long-drawn-out style that the patient evinced in relating them, and shall pass over them cursorily.

There was at first stinging in the deeper portion of the urethra during urination; to this was added a sensation as if his strength were passing out with the flow of urine, leaving a “gone-feeling” about the lower part of the abdomen, the genitals, and especially the thighs. This sensation of weakness after urination became intensified to such a degree that he was finally compelled to sit down for a few minutes after the act. Then the tired feeling became more persistent, and remained in the intervals of urination, rendering him listless and good-for-nothing. There was also nervous twitching of the calves of the legs each time that he passed water. There was increased frequency of urination; nocturnal emissions about twice or three time a week. No evidence of spermatorrhea. The bowels were obstinately constipated, and have been so up to within a few weeks. There was extreme nervousness all the time; he would become agitated and tremble on the slightest provocation. No tendency toward insomnia. Depression of spirits has been prominent all the while. He asserts that in the earlier history of the malady there was some diminution in the acuteness of his hearing, and that there was “heaviness of the eyes,” but lately the hearing is more acute than natural. The hands and feet are always cold, and he seems more subject to the influence of cold than a healthy person. He has never been impotent, and he still has inclination toward intercourse with women.

In 1883 he had gonorrhea, which lasted about two years, during which time the local sensitiveness was very much worse, and the neurasthenic symptoms were much intensified. Since then he has had transient attacks of urethritis, which he has been able to check in their incipency by means of injections.

Examination with the bulbous sounds proved that there was no stricture; but deep down in the urethra, in the membrano-prostatic region, there was an unusual amount of tenderness when the bulb reached that point. Rectal examination was negative. On looking into the urethra with the endoscope, I saw that there was abundant reason for the sensitiveness evinced during the sounding. The membrane was dark and deeply congested, thickened, and bled on slight provocation; and, most noteworthy of all, there was a granular inflammation going on in this area.

Without taking up further time in detailing this case, I will simply say that I suppose this man to have arrived at his condition of sexual neurasthenia in the following way: Healthy up to the age of fourteen, he had begun and practiced the habit of masturbation over a prolonged period, he then exercised his genital function prematurely and excessively, had acquired a chronic clap, the repetition of which, though transient, served to show that some trouble was going on all the time. All of these factors served to gradually derange and disorganize his nervous system, and at the same time to give rise to the chronic granular urethritis, which only added to the existing difficulties.

My aim in treating him has been to do away with the inflammatory condition of the deep urethra and prostate, to allay the sensitiveness, both inflammatory and nervous, of this region, and to tone up and regenerate, as far as possible, his general nervous system. With these objects in view, I naturally resorted to both local and general measures. After prescribing the usual lecture as to how he should conduct himself—to refrain from sexual congress, from dissipation, from keeping late hours, etc., I had him take, for a time, a pill composed of arsenic, strychnia, and iron, in considerable quantities; afterward, one of ergotin, cannabis indica, and strychnia. These I considered as adjuncts of but small importance. The general treatment from which I expected most benefit was that of electricity, which I gave both in the form of general faradization and central galvanization, saturating his whole organism with the fluid each time. I some-

times gave both at one sitting, and at others alternated them, giving one one evening, the other another evening, or alternated them by weeks. This, by the way, relieved the constipation to a marked degree. I advised against exercise, as it only increased the symptoms complained of. Locally, I used direct applications through the endoscope of strong solutions of nitrate of silver (30 grains to the ounce); repressed the congestive tendency by the passage of cold steel sounds of very large caliber (32 French), and by the local application of the faradic current by means of an electrode, which I had constructed for the purpose. Having the shape of the steel sound, it is easier of introduction than the bulbous instrument usually employed in urethral electrification, and, too, it affords greater contact surface, allowing of a stronger current with less irritation. It was intended by this means to give tone to the prostatic vessels, and thereby diminish congestion and inflammation, and to soothe the irritated prostatic nerve plexus. On alternate evenings he was asked to carry out the following procedure, at home, in his own bath-room. After arranging the temperature of the room so that he would not get chilled, he should direct a stream of cold water against his perineum by means of a rubber hose. This was to be kept up fifteen minutes. This plan, I believe, was first suggested by J. William White, of Philadelphia. Its object is to produce tonicity of the parts through the shock of the projection of the cold water. On the next evening the patient was to introduce a two-way nozzle, blind at the inner extremity, into his rectum, and run a stream of cold water through it for twenty minutes. This was for the purpose of refrigerating the prostate.

I have treated him by these various means for a little over a month, now; and although no revolution has been wrought in his condition, he is distinctly better in many ways. He is stronger, has a better appetite, his bowels have been more regular, there is very much less of the annoying sensation in the thighs, and the patient is more cheerful. The condition of the deep urethra is very much improved, both subjectively and objectively.

I have cited this case at length more because it was typical than because of any very satisfactory result from treatment. However, it shows that something may be accomplished in such cases by rational methods, and that they should not receive the brand "Hypochondriac" until all local irritations have been excluded, and both local and general measures have been conscientiously employed.

Good general health and a strong constitution do not preclude the existence of sexual neurasthenia. Men of the most robust frame and firmest flesh suffer from it, with impaired virility and diminished sexual desire, to as serious an extent as the puny consumptive or the most antiquated *roué*. And, moreover, they need the physician's helping hand as well as his counsel. I recall a case of this sort, a young man, aged twenty-three years, who consulted me for what he considered to be the symptoms of premature decay. He was the very picture of health in all its beaming roundness; and I was the more surprised, as I had heard him, only a year or so back, speak vauntingly of his prowess in the faculty, the loss of which he was now deploring. Based on the premises of good general health and apparently normal local conditions, much sage advice had been bestowed on him by the half-dozen or more physicians whom he had consulted. And yet he was not satisfied. Strange, how insatiable some people are! Questioning as to the history developed the fact that he had had good reason for being proud of his sexual capacities at a former period, for he had then been in the habit of having connection with, to him, a very charming mistress three or four times a night for three or four times in the week. Here was an individual in the transition stage of manly development, when these organs are weakest, causing their chronic congestion and irritation—just the kind of a condition that is especially inviting for sexual neurasthenia. The ill effects of his "youthful indiscretions" were not as mythical as some would believe—as many even told him. It was not a case of imagination with him, as, once in a great while, he was able to copulate successfully, but only after much stimulation; but if the defect were merely psychical, this

success should have been able to work a cure. Besides, he related other symptoms indicating neurasthenia, such as total abolition of spontaneous desire, nocturnal erections, etc.

Another case was that of a young man of the genus tough, who periodically went on sprees of venery, so to speak. He would then have intercourse as many times as possible, keeping up his dissipation as long as he could hold out. On this account he was chronically affected with deep urethritis and excessively irritable prostate, whose reflexes were manifested in the rectum by the most painful and sensitive anus and rectal mucous membrane that I have ever seen. He also had spermatorrhea. He, too, was an exceedingly healthy-looking man. Treatment based on the principles that I have indicated, after being carried on for some time, would invariably afford much relief, but he could not resist the temptation that Venus held out for him.

The same conditions arise from prolonged posterior urethritis, as I might show by adducing cases; but I feel that I have already taken up too much of your valuable time, and will not therefore enroach further on it.

ST. LOUIS, MO.

Reviews and Bibliography.

The International Medical Annual and Practitioner's Index for 1890. Edited by P. W. WILLIAMS, M. D., Secretary of Staff, assisted by a corps of thirty-six collaborators—European and American—specialists in their several departments. Six hundred octavo pages. Illustrated. \$2.75. E. B. Treat, publisher, 5 Cooper Union, New York.

The eighth yearly issue of this handy reference one-volume manual is at hand. In its Alphabetical Index of New Remedies and its Dictionary of New Treatment it richly deserves and perpetuates the well earned reputation of its predecessors. In this volume its corps of department editors has been largely increased, and important papers upon Thermotherapeutics, Electro-therapeutics, Sanitary Science in city and country, and the Medical Examiner in Life Insurance are features of special interest. It is truly a helpful volume, a *resumé*

of the year's progress in medicine, keeping the practitioner abreast of the times with reference to the medical literature of the world. While there is a generous increase in size and material, the price remains the same, \$2.75.

Transactions of the American Ophthalmological Society. Twenty-fifth Annual Meeting, New London, Conn., 1889. Hartford: Published by the Society.

Several times we have called attention to the transactions of this Society, and commended the work done. The same may be said of the present volume. It contains interesting and scientific papers by prominent men, and the discussion they produced. An abstract of several of these has already been published in these columns. Others of importance might well be reviewed, for instance, the paper by Dr. Gruening on "The Use of the Curette in the Treatment of Inveterate Pannus," deals with a most practical subject, and one in which all should be interested. Inoculation with gonorrheal pus and jequirity have been recommended for vascular keratitis, but they are sometimes dangerous. If by curetting the cornea, and removing in this way the large blood-vessels and trachoma masses often found here will give relief and assist in clearing it up, we have a new and valuable therapeutic procedure.

Dr. C. J. Kipp publishes a paper on "Natural Keratitis." He has seen one hundred and twenty such cases in nine years. The disease usually attacks the superficial layer of the cornea, and occurs in persons the subjects of malarial fever. Every one who practices in eye diseases in malarial districts sees cases of inflammation of the cornea that get well under anti-malarial treatment. I have seen a number of such cases, but they have presented such a variety of local lesions of the cornea that I have been unable, by the local appearance alone, to be sure of my diagnosis.

A paper by Dr. E. E. Holt on "The Inefficiency of Hydrobromate of Homatropine in Controlling the Accommodation of the Eye for the Purpose of Fitting Glasses" is one with which we are in full accord. There is no doubt but that

in many cases homatropine is insufficient for correcting defects in refraction. More than once have we used it, and regretted that we did not use atropine in its stead. In addition he states that the constant irritant action of repeated instillations of homatropine hydrobromate on the deeper arteries of the eye, the choroid, and probably to a certain extent the retina, gives answer in great measure why ametropia can not be properly estimated; hence the drug should be avoided in the correction of refraction error.

Another paper, by Dr. Edward Jackson, on "The Absolute Static Refraction of the Eye," is of much interest, but an abstract would not show clearly the value of the paper, since by the examination of four thousand eyes he proves that the proportion of the different forms of ametropia differed from those found by other observers. Sufficient has been said to show that the transactions of the Society are of decided merit.

J. M. R.

Proceedings and Addresses at a Sanitary Convention held at Vicksburg, Michigan, December 5 and 6, 1889. 73 pp. Lansing, Mich.: Darius D. Thorp. 1890.

Sanitary science in Michigan numbers among its votaries many men who possess a high order of ability, if one may judge by the style and matter of the contributions to this volume. Worthy of especial praise are the able and attractive essays and discussions of Dr. A. Arnold Clark, of Lansing. His remarks embrace the gist of volumes and the text of unending profitable sermons. What he has to say of ventilation in schools would be profitably placed in frames and hung up in the office of every school building in the land. The way the poor germs are worried, however, from the sound of the gavel to the announcement that a motion to adjourn had carried, somewhat excites our sympathy, yet there is a sort of satisfaction in contemplating that much of the anxiety of hygienists is in a measure vicarious. There are many of us who can not stir our emotions against the germs as we ought. We who take pleasure in contemplating the beneficence of germ work, how they have broken up vegetable and animal remains to top the earth with rich

mold which alone renders the production of food possible, how they purify the water we drink and even the air we breathe, and who are unable to work ourselves up into a decent fight at the thought that a few of the many are unfriendly, ought to feel thankful to the enthusiastic leaders who are willing to burden themselves with the apprehensions in which we are deficient.

Another point, which is too often neglected by hygienists, and also by political economists, viz., the employment of sewage for the renovation of the soil, comes in for a share of attention.

The present dread of microbes and their ravages may not be excessive, but one can not banish the thought that at the present rate of the increase of population largely due to the work of sanitarians, and the pre-ent rate of exhaustion of the fertility of the soil, the time must come in the not far distant future when hungry multitudes will be profuse with regrets that hygienists did not permit their great-grandmothers to be carried off in their early teens by inimical microbes.

D. T. S.

The Life and Death of Jefferson Davis, Ex-President of the Confederate States. With illustrations. Edited by A. C. BANCROFT. 256 pp. New York: J. S. Ogilvie.

This volume, which is No. 102 of the Fireside Series, contains a brief history of the life of the ex-President of the Confederacy, and an extensive account of all the events connected with his recent death, especially the comments of the journals of the different political parties.

D. T. S.

Food in Health and Disease. By J. BURNEY YEO, M. D., F. R. C. P. 583 pp. Price, \$2 00. Philadelphia: Lea Brothers & Co.

The announcement of the fact that a work on dietetics had appeared under the authorship of Dr. Yeo would carry with it the presumption that an excellent treatise had been added to the literature of the subject. "Food in Health and Disease" fully justifies the presumption. The author not only gives us here the fruits of his own mature and careful studies, but he likewise gleans with a discriminating hand all that

is best in the writings of Bauer, Koenig, Landois, Oertel, Dujardin-Beaumetz, Germain, Sée, Weir Mitchell, Parkes, Pavy, Sir Henry Thompson, and Sir William Roberts.

The work is written in a popular style, and really deserves to be in the hands of every intelligent layman as well as members of the medical profession.

D. T. S.

Essentials of Gynecology. Arranged in the form of Questions and Answers, prepared especially for Students of Medicine. By EDWIN B. CRAGIN, M. D. With fifty-eight illustrations. 192 pp. Price, cloth, \$1.00; interleaved for taking notes, \$1.25.

This constitutes No. 10 of Saunders' Question-Compends, and supplies the same excellent means of review and summary of more extensive reading that has characterized the previous numbers of the series. As supplying central points for fixing the attention and furnishing a basis for association, they are most valuable aids to memory.

D. T. S.

The Year Book of Treatment for 1890. A Critical Review for Practitioners of Medicine and Surgery. 12mo, 324 pp. Philadelphia: Lea Brothers & Co. 1890.

The Students' Surgery; A Multum in Parvo. By Frederick James Gant, F. R. C. S., Senior Surgeon to the Royal Free Hospital. 12mo, 817 pp., cloth. Price, \$3.75. Philadelphia: Lea Brothers & Co. 1890.

Food in Health and Disease. By J. Burney Yeo, M. D., F. R. C. P., Professor of Clinical Therapeutics in King's College, London, and Physician to King's College Hospital. 12mo, 583 pp., cloth, \$2.00. Philadelphia: Lea Brothers & Co. 1890.

Manual of Skin Diseases, with Special Reference to Diagnosis and Treatment. For Students and General Practitioners. By W. A. Hardaway, M. D., Professor of Skin Diseases in the Missouri Medical College, etc. 12mo, 434 pp., cloth. St. Louis, Mo: Theo. F. Lang. 1890.

Essentials of Gynecology. Arranged in the form of Questions and Answers. Prepared especially for Students of Medicine. By Edwin B. Cragin, M. D., Gynecologist to the Roosevelt Hospital. Fifty-eight illustrations. 12mo, 192 pp. Philadelphia: W. B. Saunders. 1890.

The Pulse. By W. H. Broadbent, M. D., F. R. C. P., Senior Physician to and Lecturer on Clinical Medicine in the Medical School of St. Mary's Hospital, etc. Illustrated with fifty Sphygmographic Tracings. 12mo. Price, \$1.75, cloth. 312 pp. Philadelphia: Lea Brothers & Co. 1890.

The Neuroses of the Genito-Urinary System in the Male, with Sterility and Impotency. By Dr. R. Ultzmann, Professor of Genito-Urinary Diseases in the University of Vienna. Translated by Gardner W. Allen, M. D., Surgeon Genito-Urinary Department Boston Dispensary. 12mo, 160 pp., cloth. Price, \$1.00 net. Philadelphia: F. A. Davis. 1890.

History and Pathology of Vaccination, in Two Volumes: Vol. I, A Critical Inquiry; Vol. II Selected Papers. By Edgar M. Crookshank, M. B., Professor of Comparative Pathology and Bacteriology and Fellow of King's College, London. 8vo. Vol. I, pp. 466; Vol. II, pp. 610. Cloth, illustrated. Philadelphia: P. Blakiston, Son & Co. 1890.

The Examination of Urine, Chemically and Microscopically, for Clinical Purposes. Arranged in the form of Questions and Answers. By Lawrence Wolff, M. D., Physician to the German Hospital of Philadelphia; Demonstrator of Chemistry Jefferson Medical College. 12mo, 66 pp., cloth. Price, 75 cents. Philadelphia: W. B. Saunders. 1890.

Essentials of Diseases of the Skin, Including the Syphilodermata. Arranged in the form of Questions and Answers. Prepared especially for Students of Medicine. By Henry W. Stelwagon, M. D., Ph. D., Attending Physician to the Philadelphia Dispensary for Skin Diseases, etc. Seventy-four Illustrations. 12mo, 270 pp. Philadelphia: W. B. Saunders. 1890.

Practical Electricity in Medicine and Surgery. By G. A. Liebig, jr., Ph. D., Assistant in Electricity in Johns Hopkins University, etc., and George H. Rohe, M. D., Professor of Obstetrics and Hygiene College of Physicians and Surgeons, Baltimore, etc. Profusely illustrated. 8vo, 383 pp. Price, \$2.00 net, cloth. Philadelphia and London: F. A. Davis. 1890.

A Text-Book of Obstetrics, including the Pathology and Therapeutics of the Puerperal State. Designed for Practitioners and Students of Medicine. By Dr. F. Winckel, Professor of Gynecology and Director of the Royal Hospital for Women, etc., in the University of Munich. Translated from the first German edition, with permission of the author under the supervision of J. Clifton Edgar, A. M., M. D.,

Adjunct Professor of Obstetrics in the Medical Department of the University of New York. One hundred and ninety illustrations. 8vo, 927 pp. Price, cloth, \$6.00; sheep, \$7.00. Philadelphia: P. Blakiston, Son & Co. 1890.

Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

The origin of the recent influenza epidemic has just been described by a medical man who saw the malady first break out in the Central Asian Khanate of Bokhara. He traces the primary cause as far back as the summer of 1888, which was exceptionally hot and dry, and was followed by a most bitter winter and rainy spring. The dried-up earth was full of cracks and holes from drought and subsequent frost, so that the spring rains of 1889 formed ponds and lakes in these holes throughout the Khanate, inundated the new railway cuttings, and turned the country into a perfect marsh. When the hot weather set in the water gave off poisonous exhalations, rendering malaria general. As the winter had been so severe the Bokharists were obliged to spend money on firing instead of food, so that they were weak from want of nourishment, while the severe frost of Ramadan further reduced their strength to resist disease. Then the influenza epidemic appeared suddenly and the enfeebled inhabitants died off in large numbers, while the Europeans suffered so severely that at one time all the city were in bed, and there was no one left to nurse the invalids. As soon as the sufferers became convalescent they hurried home by way of Russia for change of air and good nursing. Evidently he considers they took the infection with them, for the epidemic traveled westward along the Central Asian Railway to break out at St. Petersburg in October, and thence spread over all Europe.

Some time ago the London County Council appointed a committee to consider the question whether it would be expedient to establish a hospital for the study and curative treatment of insanity. The committee has consulted the highest authorities on the subject, and the re-

sult of its inquiries and deliberations is that it answers the question decidedly in the affirmative.

The recent intense cold has revived the influenza in many districts. It is calculated that the epidemic has cost the country fully two millions of money through loss of wages, disorganization of business, and insurances paid by the various companies and friendly societies.

At Cambridge the "cubical contents" of the heads of various undergraduates have been measured at different stages of their educational career and the results duly tabulated. An interesting account has just been given to the Senate by Mr. Prior, Tutor of Pembroke College, on the authority of Dr. Venn, "as to the cubical development of the heads of university men between the ages of nineteen and twenty-two." The students are divided into three classes, beginning with the men who read for "high honors;" secondly, the low honor men, and thirdly, "poll men," which, being interpreted, means the majority of students, who content themselves with merely taking a degree. The investigations made disclose the fact that the men who read for high honors enjoy an increase of brain mass which is represented by the figures two hundred and forty at nineteen years old, compared with two hundred and forty-seven at twenty-two. This increase goes on steadily through the three years of the undergraduate course; but while the high-honor men's brains go up seven of these mystic degrees, the second class of brains go up four only. Moreover, in the second class the brain is smaller to start with. Coming to the mass of degree men the astonishing fact is found that their cubical brain capacity advances from two hundred and thirty to two hundred and forty, in other words it has a growth even larger than that of wranglers and classical "tripos" men. Most of this growth too takes place in the second year of residence, or just when the students are undergoing teaching for the general examination. The conclusion which the Pembroke tutor wished the Cambridge Senate to draw from these facts was that the general examination was as good an educational instrument as could be desired,

and, judging exclusively by additions of cubic inches to the structure of the brain, he appears to have proved his point.

Dr. Dickinson has reported an interesting case of diabetic coma treated by the injection of saline fluid into the veins. The operation was performed upon a woman, aged twenty-five, the subject of diabetes upon whom diabetic coma had succeeded. The fluid employed consisted of chloride of sodium, chloride of potassium, sulphate of soda, phosphate of soda, and bicarbonate of soda, dissolved in water. During an hour and a half one hundred and six ounces of this fluid was injected first into one arm and then into the other. At first there was no apparent change in the patient. Ten minutes, however, after the conclusion of the operation consciousness began to return, in a short time the patient being able to converse and take food. Coma again came on, so that the following day she was much in the same state she was before the injection of the solution. The operation was again performed, one of the veins of the leg being used, into which the fluid was allowed to flow from an elevated funnel. During the proceedings the general aspect of the woman improved, the complexion becoming less livid and the pulse gained volume. The injection was continued until no less than three hundred and fifty ounces had passed in. At the conclusion of the injection the patient remained unconscious for three quarters of an hour and then recovered consciousness, and remained with no symptoms of drowsiness for nine hours, after which she was at times drowsy, but was sensible for thirty hours, at the end of which time there was a lapse into coma which was fatal. After the operation the urine was of low specific gravity, containing 1.8 per cent of sugar. It gave no acetone reaction, though this had before been strongly marked. The skin, which before had been dry, was moist, but there was no sweating. An interesting point was the fact that within the space of thirty-two hours four hundred and fifty-six ounces had been introduced into the veins. The weight of the patient previous to the first operation was found to be eighty-one and a half pounds; after death the body weighed ninety-three pounds, the gain being, no doubt,

of water. Dr. Dickinson suggested that the free drinking of water should be enforced before diabetic coma was established in cases where it was anticipated.

Dr. C. Theodore Williams has handed to the committee of the Hospital for Consumption and Diseases of the Chest, Brompton, a donation of five hundred guineas, in memory of his father, the late Dr. C. I. B. Williams, who had been connected with the hospital from its foundation, and after whom it was proposed to name a ward. The Brompton Hospital is the only institution of its kind in England, and most authorities refer to it for reliable statistics on the subject of pulmonary diseases. The name of the late Dr. Williams is, in fact, as indelibly associated with pulmonary disease as that of Harvey is with the circulation of the blood.

Dr. Robson Roore has made during recent years many visits to Norway to observe cases of leprosy and to study the clinical features of the disease in that country. He has now embodied his observations in a small volume, with the title of "Leprosy and its Prevention, as Illustrated by Norwegian Experience." Dr. Roore says that all the physicians whom he met in Norway were unanimous that segregation is the most important part in the treatment of leprosy.

The Council of the Sanitary Institute have accepted the invitation from the Town Council of Brighton to hold its autumn Congress and Health Exhibition in that town in September next.

LONDON, March, 1890.

Abstracts and Selections.

THE USE OF VERATRUM VIRIDE IN THE TREATMENT OF DISEASES.—I beg leave to introduce to the notice of the Section a few remarks upon the properties and use of the veratrum viride. We all know of its remarkable properties in reducing the frequency of the pulse. This is a property which renders it particularly valuable in diseases, and for which it has been prescribed in fevers, with extreme rapidity of circulation, and in inflammatory affections of the lungs. It diminishes the pulsations of the heart and arteries twenty

or thirty strokes in a few hours, simply by its action upon the brain and nervous system. Its powers, I am induced to think from some trials with it, will be found of more value in chronic affections, and as little has been stated of its application to these cases, I shall be excused for calling your attention to some of these diseases, in which, after a moderate experience, I am disposed to think it will prove a valuable agent. These are, first, affections of the head, and all the kindred complaints connected with undue excitement of this organ. These diseases are exhibited in every variety of form, from dullness of the faculties, with heaviness, stupor or oppression, to those more exalted conditions of the same organs, as manifested in extreme nervousness, keen sensibility, and finally perverted reason. These various grades of excitement are connected with undue vascular action, and this again with organic structure. Any article which operates so efficiently upon the vascular system, must have its influences first exerted upon the seat and center of all the vital operations of the body, and it is to sedation, then, that we are to ascribe its beneficial effects in the diseases I am about to bring to your notice.

The simplest disorder of the head in which its good effects are manifested is in vascular fullness of this organ, particularly manifested in the advanced periods of life. The symptoms following upon this state of the brain, and giddiness, dullness of the mental faculties, constant headache, dimness or darkness of vision, the movements of the body being much circumscribed. For the removal of these symptoms I have found the tincture, largely diluted with water, and taken at regular intervals during the day, very effectual. The form of administration is the following: Tinct. verat. vir., gtt. xxv; aqua, 3 vi. M. The dose is 3 ij to 3 iv every two or three hours until relief is obtained. The doses operate favorably, often without any sensible evacuation, sometimes only to give regularity to the bowels. The next class of cases are those connected with a greater degree of vascular action, and the first that I shall bring to your notice is epilepsy, and unconnected with any mechanical derangement, but a nervous affection, as when it is brought on by grief or mental disappointment.

In a case of this nature, the same formula for its administration, as already mentioned, has been efficacious in diminishing the frequency of the paroxysms and of rendering them milder. From a daily recurrence, they have been suspended for a week; and from a violence in their action, attended with convulsive contraction, they have been reduced

to simple unconsciousness of short duration. Upon their recurrence there is no foaming at the mouth, nor is the patient thrown down, but the paroxysm occurs while standing, and rapidly exhausts itself. The only sensible effects, after a month's use of the article, was to impair the appetite, and to give regularity in the operation of the bowels. I prefer presenting the results of this article in a condensed form, rather than in detail.

Another class of diseases of the same organ is that characterized by extreme nervousness, or such exaltation of nervous excitement as borders on mania. We recognize in such subjects extreme vivacity, with alternate dejection of spirits, cephalalgia, febricula, impaired digestion, coldness of the extremities, sallow complexion; subjects as described seem to be on the verge of insanity, and, without proper care, pass rapidly into all its wildness and extravagances. Temperance alone holds the reins and keeps the system from rushing headlong on destruction. With this, so valuable a mentor, our medicine strongly coöperates, and, in a case from which my description was drawn, was found highly useful in repressing exuberances and extravagances of feeling and conduct, which gave to those about the patient the impression of madness approaching, while it calmed and relieved the bodily indispositions. The same form of administration was pursued as in the preceding.

In one other form of disease, of a cerebro-spinal character, viz., crural neuralgia of the lower extremities, the virtues of this article have been tested. This disease has the misnomer, rheumatism, too frequently applied to it, which it too often resembles in its worst features; and without some suitable and reasonable remedy the patient is doomed, I might say, to a life of confinement and of suffering. I will not detain you by referring to its causes. In general terms, it is produced by whatever gives rise to inflammation of the spinal column, particularly about the lumbar portion, as lifting heavy weights. After an extensive employment of many articles, I have derived almost immediate relief from the veratrum, the pains in the limbs being greatly mitigated, the uneasiness of the back relieved, the power of locomotion regained in a very short time after commencing the use of it.

Another form of disease of rather different character, but in which, from its reputed operation, it may be considered useful, is in cancerous affections. An article which, from its sedative influence upon the human system, could reduce the pulsations of the heart and arteries twenty, thirty, or forty strokes in the minute, in the course of sixteen or eighteen

hours, must be considered a useful agent in this disease, attended, as it is, with an exalted state of nervous sensibilities. It was a very suitable subject for experiment, and without any authority, but with an eye to its reputed qualities, I considered that it might be advantageously resorted to. Accordingly, in a case of carcinoma uteri, where the sufferings of the patient were of the usual intense character, I have succeeded in affording very great relief, and this without any of the narcotism induced by the preparations of opium. A great change has been brought about in the sufferings and condition of the patient, and from many painful hours by day and sleepless ones by night she has come to enjoy comparative ease, the paroxysms of pain being less frequently renewed, and no night passing without quiet sleep of from four to six hours. The form of administration is that already detailed: Tinet. verat. virid., gtt. xxv or xxx; aqua, $\bar{3}$ vj; do-e, $\bar{3}$ ss, taken every two or three hours. This quantity was given daily, without producing any great uneasiness of stomach; and when, from long use, its powers began to subside, they have been sustained by the addition of $\bar{5}$ j to $\bar{5}$ ss of laudanum to the mixture, and this quantity taken in the twenty four hours. By this compound unwonted energy has been given to the mixture, an effect too great from the amount of laudanum added, so much so, that for the past forty-eight hours comparative tranquility has prevailed, and many hours of sleep obtained. In a disease of such a character, any addition which can be made to our resources in counteracting its malignant disposition is a duty we owe to our patients, and a great relief to the physician; and it is from the satisfaction I have felt from this single trial that I have been induced (thus precipitately, as may be thought) to proclaim its efficacy. To alleviate pain is as much the province of the physician as to cure disease; and since in many it is all the relief we can aim at, and fate decrees that we must die, it is no less the duty of the physician to soothe and soften the horrors of its approach, and let the passage at least be easy and serene.

These are the few diseases in which I have tested its operation, and they are of a different character from any in which it has been recommended. I may be only on the threshold of inquiry, and it is with a view to elicit from others more information, or a confirmation of my statements, that I have been induced, rather hurriedly, to bring them to the notice of the Association. I have consumed, in these experiments, between two and three ounces of the tincture, and have not known any unpleasant effects produced from the use of it. From

my present experience and impression, I am disposed to think that it will always occupy a prominent position in the *materia medica*. As a local application I have used the white hellebore in scabies, herpes, and kindred affections. I must be excused recording its efficacy in removing a fungous growth from the inner part of the arm, at the elbow-joint, of a wary character, of the size of a hickory nut, which had existed twenty-five years. The patient was of very advanced age, bordering on ninety years; was much annoyed at this morbid growth, not only from the size of the tumor, but from its offensive odor; the profuse discharge irritating the adjacent skin, making necessary frequent dressing and cleansing—but for her age and extreme aversion to the knife, excision would have been practiced. This morbid growth, after the trial of many articles, was removed by being powdered several times a day with the root of the white hellebore. Its effect was to cause the immediate cessation of the discharge and a gradual exfoliation, I may say, from the whole surface of the tumor, until it was finally entirely removed. To have removed in a short time, by such an application, what the knife seemed only capable of accomplishing, seemed a triumph worthy of record, and must be plead my apology for its introduction.—*Dr. Thomas Legare, Journal American Medical Association.*

FOREIGN BODIES IN THE BRAIN.—Instances of this kind, though very remarkable, are well known to surgeons; and surgical literature, particularly that portion relating to gunshot wounds of the head, proves conclusively that as individuals may live for some time with considerable depression of the cranial wall, and after deep and extensive destruction of the brain through injury or disease, so the presence of a foreign body within the skull is not incompatible with a prolonged and comfortable existence. In 1873 Dr. Wharton, of Philadelphia, was able to collect from different sources 316 cases of penetrating wound of the skull. In 106 of these cases the foreign body was removed, and in 88 of the remaining cases, in which the foreign body could not be reached and was allowed to remain, the patients recovered. That a bullet, or a fragment of a larger projectile, may remain imbedded in the brain for months or even years without causing any very serious symptoms has also been proved by a table of seventy-two cases collected by Dr. Andrews, of Pennsylvania. Sir Thomas Longmore has put on record the case of an English officer who, with a musket ball imbedded in his brain, was able to discharge certain military duties during nine years after the receipt of the injury.

In several of these instances the foreign bodies were of considerable size and weight. A well-authenticated case has been published in which recovery followed the removal, on the twenty-seventh day after the injury, of the linch pin of a cannon, which had been driven into the brain through the frontal bone. Hughes, an Irish surgeon, has published an instance in which a patient lived for fourteen months without any bad symptoms, with a portion of a breech of a gun in the anterior lobe of the brain. One of the most remarkable of such injuries is that recorded by O'Callaghan, and referred to in *Erichsen's Surgery*, in which an officer lived for nearly seven years with the breech of a fowling-piece, weighing three ounces, lodged in the forehead, and resting on the surface of the brain, from which it was separated by false membrane.

Notwithstanding the numerous instances on record of apparent recovery from effects of a penetrating wound of the skull, and of the survival over a period more or less prolonged of a patient carrying a bullet or some other heavy body in his brain, the prognosis in such cases, as has been insisted on by Bruns, is always very unfavorable. As a rule, even in cases in which the patient has survived for ten years or longer, the presence of the foreign body ultimately has a fatal result. In most cases the injury is followed by headache, impairment of hearing and vision, muscular debility, psychical disturbances, and epileptiform attacks, and the presence of the foreign body is apt to set up, sooner or later, inflammatory conditions of the brain or its membranes and cerebral abscess. The occurrence in some of the fatal cases of sudden death, after a long-continued tolerance of the foreign body, has been accounted for by the results of investigations made by Flourens, who found that a bullet or any heavy body lodged near the upper surface of the brain has a tendency to sink down gradually through the cerebral substance toward the life-maintaining centers of the organ.

This subject of foreign bodies in the brain has of late acquired increased importance and interest through its relation to the results of recent researches on the localization of cerebral functions. Unfortunately in many of the recorded cases the seat of the penetrating wound has not been closely described, and much obscurity often remains as to the nature and extent of the morbid phenomena which have been hitherto observed. In many instances, and especially in those of unusually large and weighty foreign bodies, the frontal lobe seems to have been the region mainly, if not exclusively involved. The few investigations which have been made on this point fail to give much

information, as there is a marked difference of opinion between the observers, Guthrie having held that a penetrating wound of the brain is more dangerous in the frontal and less so in the occipital than in the parietal region; whilst Brodie, on the other hand, was of opinion that recovery most frequently followed injury of the anterior lobe.—*The British Medical Journal*.

THE TREATMENT OF WHOOPING-COUGH.—(*Rev. Mens. des Mal. de l'Enf.*, July, 1889.) A paper by Mugdan contains the results of treatment with resorcin, antipyrin, cocaine, and the in-sufflation of various powders into the nose.

Resorcin was first advocated by Moncorvo for whooping-cough. He started with the idea that whooping cough is essentially an infectious catarrh, provoked by micro-organisms, which are located in the laryngeal mucous membrane, under the vocal chords, and then began to use applications to the larynx of a one or two per cent solution of resorcin, which he gradually increased to eight per cent. In Baginsky's clinic resorcin has been used internally, but without any appreciable result; eight patients were treated with it without benefit. Afanasieff's investigations tend to show that the habitat of the bacillus is not limited to the laryngeal mucous membrane around the vocal chords, but that it may be found in the mucous membrane of the entire respiratory tract. This being the case, it is possible that good results might follow inhalation of fifteen or twenty-per cent solutions of resorcin. Applications of cocaine were first recommended by Prior, who anesthetized the larynx and pharynx with five to ten-per cent solutions of cocaine, and so was enabled to make careful laryngoscopic examinations. Many other authorities, have used the same method of treatment with good results. The method is not altogether reliable, however, on account of frequent phenomena of intoxication which attend its use.

Michael considered whooping-cough as a reflex neurosis of the nose, caused by the irritation of a specific virus, and proposed in-sufflation into the nasal fosse of boric acid and quinine, or of benzoic acid. His results have been very satisfactory. Guerdner also advised the in-sufflation of a mixture of boric acid and pulverized coffee in equal parts, and his results were also good. This method of treatment has been tried by different authors and found efficient, Genser alone complaining that it had no effect on the progress of the disease. This method was tried in twenty-five cases in Baginsky's clinic, benzoic acid alone being used, and seventeen were much benefited after the first in-sufflations. A cure resulted usually in from one to three weeks.

Recently, antipyrin has been much used in the treatment of whooping-cough, and most of those who have tried it have had good results. In Baginsky's clinic it failed entirely to accomplish what was hoped from it. It is not a harmless remedy, and frequent reports have been made of its intoxicating properties.—*Archives Pediatrics*.

THE ETIOLOGY OF INFLUENZA.—The Journal has already published a short summary as to the results of the bacteriological investigations in influenza and its complications by various observers—Jolles, Weichselbaum, and Klebs—and we have now to supplement them by the further results of such observations published recently by Ribbert, Finkler, Prudden, and Babes.

Professor Ribbert, of Bonn, vindicates for the streptococcus pyogenes the power not only to convey the croupous pneumonia complicating influenza, but he goes so far as to say that he sees no reason why this organism should not be considered also the primary cause of the influenza, since in all and every one of the cases of pneumonia following influenza which he examined, both in the sputum of the living and in the body after death, he found this microbe, and only this.

Professor Finkler, of Bonn, examined forty-five cases of pneumonia after influenza; two of these were of the typical fibrinous croupous type, forty-three of a type similar to but not identical with it. These latter cases were such as he had met with and described before, and were caused by the streptococcus pyogenes, hence they had been called by him "streptococcus pneumoniae."

Prudden discovered in the sputum of two out of three cases of bronchitis associated with influenza the presence of large numbers of streptococcus pyogenes, this being the prevailing species; in the third case, however, he found the diplococcus pneumoniae. Of six cases of pneumonia following influenza, the bacteriological examination of the sputum revealed the presence of the diplococcus pneumoniae in four; in the fifth case that of the streptococcus pyogenes and staphylococcus pyogenes aureus; and in the sixth (fatal) case the diplococcus pneumoniae was present in pure culture.

Babes give the results of the bacteriological examination of the secretion of the nasal cavity and frontal sinuses in several acute cases of influenza, and besides, as might have been expected, isolating staphylococcus aureus and albus, and the bacillus of Friedländer, obtained several new forms of bacteria, notably two species of bacilli, the cultures of both of which produced on injection into rodents fatal results,

notably pneumonia. In several instances of fatal pneumonia following influenza, Babes isolated various forms of streptococci, the bacillus of Friedländer, the staphylococcus aureus, and various other bacterial species acting pathogenically on rodents.

Though all the observations as yet recorded by the various observers can not be said to have brought us directly nearer to a knowledge of the contagium of influenza, they have nevertheless paved the way, as it were, for further researches, for they have at least taught us to know and to discard as unessential those forms which are not the microbes of influenza, but which most commonly occur in the various secretions under certain pathological conditions, for example, in influenza and its complications. In these reports the research of Besser deserves a place as a valuable introduction to the bacteriological observations of all the authors previously mentioned. Besser examined with the microscope and by bacteriological methods the secretion of the nasal cavity of fifty-seven men between the ages of twenty and sixty years; twenty-eight of these were convalescents from various ailments, not influenza or its complications, and the rest (thirty-one) were perfectly healthy. In eighty-one examinations Besser found the diplococcus pneumoniae and the staphylococcus pyogenes aureus fourteen times each, and only twice the bacillus of Friedländer, and seven times the streptococcus pyogenes. All these microbes acted pathogenically on rodents, and were present in large numbers, occasionally in pure cultures, but a whole list of other species were also isolated from the secretion in the various cases. Also other secretions, like that of the frontal sinuses, of the antrum of Highmore, of the larynx, and of the bronchi, were carefully examined bacteriologically, and the results described; among these the species found in the bronchial sputum deserve to be specially named. The streptococcus pyogenes was found in two cases of phthisis; a microbe similar to but not identical with it was found in two cases of scarlatina; the diplococcus pneumoniae in one case each of fracture of cervical vertebra, of tuberculosis of the peritoneum, and of enteric fever; the staphylococcus pyogenes aureus in one case each of tuberculosis, carcinoma uteri, and gangrena senilis.

Two conclusions seem naturally to flow from these observations of Besser, namely, that of all the species of bacteria found associated with influenza by various observers, none can have a causal relation to this disease, and that the grave suspicions entertained by some, even as to the often-asserted etiological relation of the diplococcus pneumoniae to fibrinous or croupous pneumonia are well founded.—*Brit. Med. Jour.*

SUCCESSFUL REMOVAL OF A CANCEROUS TUMOR FROM THE PANCREAS.—Professor G. Ruggi, of Bologna, has recently reported a case in which he successfully removed a cancerous growth from the pancreas. The patient was a woman, aged fifty, who had suffered for some time from swelling of the abdomen, which caused great discomfort and occasionally severe pain. Though still well nourished, she had lost flesh considerably; the digestive functions were much disordered, but all the other organs seemed to be perfectly healthy. The patient suffered from profound mental depression, which she said was worse than her bodily sufferings. On examination the abdomen was found to be uniformly distended by fluid in the peritoneum, and two tumors could be felt, one above the other, with a distinct line of demarcation between them. The lower one was continuous with the body of the uterus, and was judged to be a fibro-myoma. The upper mass occupied the left colic and hypochondriac regions, and extended in front toward the umbilicus. Its posterior extremity corresponded to a prolongation of the mid-axillary line, and the anterior to a prolongation of the parasternal line. The tumor measured twenty-five centimeters in its long, and thirteen in its short diameter. If the patient lay down with her shoulders lower than her pelvis, the tumor disappeared under the arch of the ribs, returning to its natural position when she sat up. Vaginal examination, while confirming the diagnosis with respect to the lower tumor, threw no light on the origin or relations of the upper one. The spleen, kidneys, and liver were normal to palpation. A provisional diagnosis of retroperitoneal adenocarcinoma was made, and laparotomy was performed on September 4, 1889. The patient having been placed on her right side, the abdomen was opened by a lateral transverse incision just under the left costal arch. In attempting to separate the tumor from the peritoneum, to which it was adherent in front, the peritoneal cavity was opened, and a quantity of yellowish fluid escaped. The mass was then drawn through the hole in the peritoneal sac, bringing with it the omentum and a loop of the small intestine surrounding the lower and inner end of the tumor. The latter was soft, like brain substance, and broke down under the fingers, but the operator was able by degrees to pick it off the intestine to which it was attached, a catgut ligature being applied here and there. The adhesions to the omentum were firmer, and that structure had to be divided into bundles, which were tied separately and cut through. The tumor when brought away was a shapeless mass of pulp, bearing no resemblance to the normal pancreas. The peritoneal

cavity was carefully cleansed, and drainage-tubes placed in the posterior part of the wound. The front part healed by first intention, and the patient made an excellent recovery, being discharged cured on October 26th. Her appetite was excellent, and the deep depression from which she had suffered before the operation had entirely disappeared. Recent accounts state that she is still in perfect health. The fragments of the growth removed weighed six hundred and fifty grains; microscopic examination proved to be a glandular cancer. Professor Ruggi thinks that little or none of the affected organ was left behind; the opening into the duodenum was certainly destroyed. The patient's digestion, however, is perfect, although no particular precautions have been observed as to diet.—*Ibid.*

THE CELIAC AFFECTION IN CHILDREN.—Under this title Dr. Gibbons gives an admirable account of a disorder which has hitherto met with but little recognition in this country. Some two years ago Dr. Gee delivered a lecture on it at the Hospital for Sick Children, Great Ormond Street, and about the same time he published a short but most valuable note on it in the St. Bartholomew's Hospital Reports. Dr. Gibbons is, however, the only writer, so far as we are aware, who has attempted to give a full description of the disease or to assign a cause for it. After giving details of four cases as typical illustrations, he sums up the chief clinical features. The onset is usually gradual. The child may have been out of health for some weeks or months, but there has been nothing in its state especially to cause alarm, although it may have been getting anemic and perhaps puffy about the face. An alteration in the character of the motions is usually an early symptom. The chief feature is the intensely fetid odor. The stools are generally very large, soft, whitish and often frothy. Usually there is only one action of the bowels, *per diem*, so that there is no true diarrhea; but the subjects of this disorder are very liable to intercurrent attacks of watery diarrhea. The appetite is poor and usually capricious. The tongue may be clean, or coated with a whitish fur. Pain in the abdomen is sometimes complained of. The abdomen is generally soft and doughy; the liver is not enlarged; the spleen may be occasionally felt; no enlarged lymphatic glands can be made out; the urine is generally natural. As a rule the child is fretful and irritable, sometimes heavy and languid.

The loss of muscular strength is one of the most striking features of the malady. The

children do not waste much, but their flesh becomes very soft. Great difficulty in going up stairs is often an early symptom. Death may result from an attack of watery diarrhea or some such complication. When recovery takes place, the improvement is always very slow. The muscular strength is the last to return, and the slightest imprudence in diet may induce a relapse. The prognosis is decidedly grave, and will depend in some measure on the position of the parents. The *post-mortem* appearances are practically *nil*: no ulceration of the intestine is found; its mucous membrane is not especially wasted; the mesenteric glands are not enlarged. Examination of the blood and feces under the micro-cope has not as yet revealed any thing as to the nature of the affection. In treatment the diet is all important. Cow's milk is injurious, owing to its large percentage of casein. Ass's milk should therefore be substituted for it; but whenever possible, of course, in the case of an infant, human milk is to be preferred. Cream may be given mixed with a little scalded whey made from cow's milk. When the child is thirsty, it may be allowed to drink whey prepared from cow's milk. Pounded raw meat should be given for the principal meal of the day. Beef steak, freed from all skin and fat, cut up finely, pounded in a mortar, and rubbed through a hair sieve is the form in which it should be given. To make it palatable it may be mixed with a little sifted sugar or plain fruit jelly, and a pinch of salt added. Plain biscuits or rusks with plenty of fresh butter may be allowed, and a little floury potato may be given with the meat. Mutton answers all the purposes of beef, and is free from the risk of tapeworm. It is important that the child should be thoroughly well clothed; that the whole body should be covered with silk or wool; that he should be kept free from draughts; that he should sleep in a well-aired bedroom, and that he should be placed generally in the best hygienic surroundings. Bismuth is the drug that has proved most serviceable, with compound kino powder or compound tincture of camphor if there is diarrhea. Cod-liver oil and perchloride of iron are useful remedies in the general treatment; while in obstinate cases, accompanied with watery diarrhea, minute doses of gray powder have proved of service. Changes to the seaside are of no great consequence, as the disease is influenced only by diet. Of the etiology nothing is known for certain. The disease occurs equally among the rich and poor; it is more common during the first two years of life or thereabouts. Dr. Gibbons surmises that the origin should be sought for in the secretions of the liver, pain-

creas, and intestines. He reminds his readers that the bile possesses anti-septic properties, and points out that the absence of the constituents of the bile which produce anti-sepsis would account for the decomposition which the feces undergo in this disorder. As he says, the explanation is a reasonable one, for there can be no doubt that the food is hurried along the intestinal tract and undergoes decomposition. This explanation would account for the large size of the motions, out of all proportion to the amount of food taken, the increase in bulk being only intelligible on the hypothesis of fermentation. There is evidence also that the secretions of pancreas and intestinal glands are deficient, and Dr. Gibbons therefore suggests that this disorder is due to some profound nervous disturbance inhibiting the secretions more or less of the liver, pancreas, glands of Brunner, and Lieberkühn's follicles.—*Edin. Med. Journal*; October and November, 1889.

DIPHTHERIA IN THE LIGHT OF THE MOST RECENT INVESTIGATIONS.—The recent investigations of Roux and Yersin (*Le Concours*, April 27, 1889) have revived the controversy as to the nature and best method of treatment of this disease. Simon reiterates the opinion, which he long since expressed, that the local treatment, with rapid and frequent removal of the false membranes, was the correct and rational one, and this opinion is shared by the author, who has long considered the false membrane as a point of departure of the infectious element.

The pathogenic mechanism of diphtheria is as follows: Diphtheritic germs are carried by a great variety of means to the buccal, pharyngeal, or laryngo-bronchial mucous membrane, which has been deprived at certain points of its epithelium, in the course of an acute catarrhal inflammation, which may have been very slight in character. Grancher believes that the infecting element is communicated more frequently by persons and objects than through the medium of the air. The habit which is so common with children of touching all sorts of objects, and of frequently carrying the fingers to the mouth, must explain the infection in very many cases. Loeffler has found the bacillus of diphtheria in the mouth of a child who was not ill, and this suggests that the bacillus is not offensive under all circumstances. This being so, it only awaits an inflammation of the mucous membrane or a loss of the protecting epithelium to manifest its virulence and elaborate its poison, which penetrates the organism. Inoculation is generally effected upon the tonsils and isthmus of the pharynx, because with each act of swallowing the saliva

is brought in contact with these organs, the microbes being carried with it and the false membrane developing in a short time. The membrane may be the result of a fibrinous degeneration of epithelial cells infiltrated with an albuminoid substance, or it may be due to the production of a cellulose-fibrinous exudate rapidly causing coagulation, necrosis, and thus forming the white, opaque, dense membrane intimately adherent to the mucosa. The blood and the organs rarely contain the diphtheritic microbes, but the soluble chemical poison which they secrete, absorbed at the point of production, produces the toxic symptoms which are so well known. Hence, the object of treatment should be the destruction of the microbes wherever false membrane indicates their presence. This is to be attained not only by the inhalation of vapors, whether of turpentine, tar, or carbolic acid, but by local manual interference, according to the method of Grancher. Applications of the mercurial salts are frequently made, but they are too irritating, and by their diffusion destroy tissue which is not diseased. A better mixture is phenol, combined with camphor or oil. With such a mixture upon a stiff brush (*ceurillon*) one may attack false membrane rather vigorously. Grancher's formula for the mixture for local application is: Acidi tartarici, 1 gram; acidi carbolic, 5 grams; alcohol, 10 grams; camphor, 15 grams; ol. amygdal. dulc., 20 grams. To be applied locally morning and evening.—*Archives of Pediatrics*.

THE OPERATIVE TREATMENT OF PERFORATIVE PERITONITIS.—J. Mikulicz, Königsberg, at the Eighteenth German Surgical Congress, read a monograph on this subject which contains some suggestions worthy of consideration. He considers that the results, though brilliant in some instances, are not *in toto* satisfactory, and suggests that sometimes the operative interference has hastened the patient's death. He has endeavored to distinguish those cases which are favorable for operation from those incapable of relief, and thinks this can be best ascertained by a study of the pathology of septic peritonitis, and a recognition of its different types: (1) Its different origin, both as regards seat of perforation and cause; (2) its varied course. Mikulicz has found two types: (1) A diffuse septic peritonitis, due to immediate infection of a large peritoneal surface; rapid development, acute or foudroyant; variable amount of thin sanguino-serous or purulent, putrid, thin fluid; a thin fibrinous deposit, but no firmer or more extensive adhesions. (2) Acute or subacute, at first localized to immediate vicinity of perforation. Exudation

fibro-purulent, which shuts off the infected from the intact peritoneum by adhesions. The inflamed portion is continuously separated from the healthy peritoneum, but the limits of the process steadily extend, thus encapsulating, between the agglutinated viscera, pus in greater or less amounts—a “progressive fibro-purulent peritonitis.” In the first form Mikulicz considers a thorough operation rational. He would freely open the peritoneal cavity, find and close the perforation, disinfect, as far as possible, the whole peritoneal surface. In the fibro-purulent form this is contra-indicated, and the adhesions should in his opinion be carefully preserved. He thinks that the fresh infection from the freed contents of these encapsulated foci of purulent exudation has been the active cause of many failures to save life. In this form not the peritoneal cavity as a whole but each intra-peritoneal abscess should be evacuated separately. His action in two cases corroborates this view. In one, six intra-peritoneal abscesses were evacuated through three incisions at four successive operations. In the second three different operations were necessary to relieve the patient. Here three separate abscesses were opened as the separate foci became evident at three different points, namely, the rectum, the right and left groin. The diagnostic indications for locating such abscesses are increased resistance, tenderness, dullness, and an elevation of temperature; in doubtful cases an exploratory puncture. A free incision should divide the abdominal wall where the abscess is most prominent. This form of peritonitis does not extend so erratically as has been supposed. The cavities should be carefully irrigated—drained by packing with iodoform gauze and not closed by suture. The patient should be carefully watched till the abdomen is uniformly soft, all tenderness is absent, and the temperature has been normal for several days.—*Boston Medical and Surgical Journal*.

THE SECONDARY INFECTIONS IN SCARLATINA. (*Rev. Mens. des Mal. de l'Enf.*, September, 1889). Guinon says: The idea of a possible secondary infection has become too prevalent to allow it to pass without consideration. Chanin says that it results from the penetration into the organism of a second microbe, which is added to and is distinct from the first. Before the idea of microbial infection was applied to the eruptive fevers, the question had been raised whether the abnormal phenomena appearing in the course of these diseases was of the same nature as the primary disease, and whether they resulted from external or internal conditions; whether, in a word, they constitute

a function of the primary disease or were the manifestations of another disease engrafted upon the first. The discussion of this subject has, of course, a practical as well as a theoretical side. Bouchard, after studying the local manifestations in general diseases of the character under discussion, has demonstrated that the accidents and complications in these diseases are almost always new diseases, which are distinct from the original ones. The number and gravity of the complications occurring with scarlatina render it most suitable for the application of this theory. As a matter of fact, we do not as yet know the characters of the microbe of scarlatina, but we do know those of the micro-organisms which produce secondary infections in that disease. Klein, Crookshank, and others have discovered micro-organisms which were supposed to be peculiar to scarlet fever, but their results are not entirely harmonious, and have not been entirely convincing. Levhartz, Marie Raskin, and Babés, on the other hand, have studied the blood, the viscera, and the organs especially involved in the complications of scarlatina. In suppurative adenitis, Raskin found in seven cases, with or without diphtheria, a streptococcus which was constantly present. With tonsillar and pharyngeal ulcerations, Lenhartz found a thick layer of chains of streptococci, without the presence of gangrene—that is, the streptococcus was evidently a secondary manifestation. In septicemia, occurring as a complication, absolute conclusions were not drawn. Raskin found a streptococcus and a small and oval micrococcus, but did not determine their nature nor their virulence. In the blood the streptococcus was rarely found. Raskin found it in only six cases out of twenty-three. Both Raskin and Babés found the streptococcus, with other microbes, in connection with complicating pleurisy, pneumonia, pericarditis, and endocarditis. It was believed that the bacteriology of the pericardium was identical with that of the pleura. In scarlatinal pyemia, investigators are agreed that the streptococcus, is the most frequent cause, but other microbes are found at the same time in the same organ, or in other viscera. In nephritis an important point to be decided is, whether the microbe acts upon the kidney by itself or by the products which it secretes, and recent investigations tend to show that the former supposition is the correct one. Raskin has found and isolated in the kidney the streptococcus alone or united with a micrococcus, a diplococcus, or a bacillus, and they were also found in other organs. Babés studied fourteen cases, in which there were albuminuria and edema, and in thirteen the streptococcus, alone or associated

with the pneumococcus of Talamon-Fraenkel, was found. In scarlatinal rheumatism, three forms or varieties must be distinguished, a serous non-suppurative form, a serous suppurative form, and a form in which suppuration occurs at the outset. In the non-suppurative fluid of the synovial membrane Raskin found the streptococcus; in purulent arthritis the streptococcus may be found in great numbers.

In the pus of otitis Raskin constantly found the streptococcus, and in the later stages of the disease it was associated with the staphylococcus aureus et staphylococcus albus. In diphtheria Raskin found streptococci, diplococci, micrococci, and Loeffler, in addition to the streptococci, found also the Klebs-Loeffler bacilli. From the foregoing, it would appear that most of the complications in scarlatina are due, in all probability, to the action of a streptococcus, either isolated or associated with other microbes, and it has always presented the same character, with the exception that it varies in virulence. It is probably identical with the *streptococcus pyogenes* of Rosenbach, and Lenhariz thinks that it is modified in scarlatina by the primary infection. It is probably this organism which causes death in scarlatina, either directly by septicemia or indirectly by nephritis. Secondary infection in this disease most frequently occurs by way of the pharynx, and the penetration of the microbes is favored by the loss of epithelium, by the dilatation of the lymphatic channels, and by the recumbent position which the sick child assumes. The foregoing indicates anti-sepsis of the throat in all the pyrexias of childhood, but especially in scarlet fever, and before any complications occur; but caustic or irritant applications must always be avoided because of their destructive action upon epithelium.—*Archives Pediatrics*.

IN STUBBORN CONSTIPATION IN WOMEN Dr. Lutand (*Revue de Therap. Med. Chir.*) has found the following most efficacious:

Ferri et ammonia citrat.....gr. xxxj;
Ex. cascarae sag. fl.....℥xxxij;
Saccharin.....gr. viij;
Aquaë destillatf ʒiis.

M. Sig: A half teaspoonful before each meal.

NASAL CATARRH.—Prof. Leffert's solution for nasal catarrh is as follows:

Acidi carbolicum.....ʒi;
Sodii boratis.....ʒi;
Sodii bicarbonatis.....ʒi;
Glycerine.....ʒi;
Aquaë rose.....ʒi;
Aquaë.....ad Oi.

M. Sig: Use as a spray.

CATARRH SNUFFS.—For scrofulous rhinitis:

Sulphophenate of zinc.....20 centigrams;
Tannate of zinc.....2 grams;
Pulverized tobacco.....10 grams;
Salicylate of bismuth.....4 grams;
Iodol.....3 grams.

For chronic catarrhal rhinitis (*Jour. de Med. de Paris*):

Pulverized alum.....2 grams;
Borax.....2 grams;
Menthol.....20 centigrams;
Tannate of zinc.....3 grams;
Tannate of bismuth.....3 grams;
Locopodium.....8 grams.

TREATMENT OF PROFUSE MENSTRUATION:

Dialyzed ergotine.....40 grams;
Distilled water.....70 grams;
Glycerine.....20 grams.
Salicylic acid.....20 centigrams.

T. One teaspoonful diluted with three teaspoonfuls of water to be injected in the rectum once a day after stool.—*Rein-tadter, Gaz. Med. de Lieges*.

INTRA-MUSCULAR INJECTIONS OF MERCURY IN THE TREATMENT OF SYPHILIS.—In the last part for 1889 of the *Archiv für Dermatologie und Syphilis*, Dr. Watraszewski discusses the effect of the injection of insoluble mercurial preparations into the muscles. The mercurial salts, recommended for their parasiticide effect on theoretical grounds, have not shown any advantage, and practically the question of advantage lies between calomel, the yellow oxide, and the gray oil of mercury. With respect to calomel, while it is undoubtedly very effectual in the treatment of syphilis, it has proved dangerous to the patient, Runeberg having collected seven fatal cases; but the author found that dangerous symptoms could to a great extent be avoided by reducing the dose originally suggested by Smirnoff from three grains to not more than two thirds of a grain, and this, too, without sacrificing its therapeutic efficacy. He regards the gray oil as recommended by Lang and Neisser as still more dangerous, instancing Kaposi's fatal case and Hallopeau's case of severe stomatitis and several cases of fat embolisms in the lungs which are on record. The author expresses, therefore, a decided preference for the yellow oxide of mercury, but in the reduced dose of two thirds to one grain. These doses he has given thousands of times without ill effect, while the doses originally recommended, of from two grains to two grains and a half, have produced serious symptoms, such as adynamia, diarrhea, stomatitis, etc.

The choice of the vehicle for injection is not unimportant. Those hitherto used have been generally glycerine, olive, almond, or paraffin oils, or gum Arabic mucilage. The author made experiments on this point, injecting these vehicles alone into the jugular veins of cats, and found that serious embolic pneumonia was excited by the oily fluids, while the mucilage only produced scattered embolic foci of small size, which were absorbed without subsequent reaction of any importance. These experiments have a practical bearing, for in intra-muscular injections a vein is occasionally pierced, and serious pneumonia has ensued. Glycerine excites local irritation, and is therefore unsuitable. Dr. Watraszewski therefore finally decides that mucilage (gum Arabic 1 part, water 120 parts) is the best, as it combines all the essentials of a vehicle, viz: (1) It can be made of the proper consistence to hold the powder in suspension. (2) It has no local irritating effect. (3) It does not decompose the mercurial salt. (4) It excites no general disturbance. In the same number Touton relates a case in which, a few hours after the third injection of salicylate of mercury into the left gluteus muscle, that muscle seemed paralyzed, and then tenderness and pain were felt radiating up to the sacrum and lower lumbar vertebra, but abruptly terminating at the middle line. The pain lasted two days, but twenty-four hours after its commencement there appeared an abortive herpetic eruption; that is, the eruption consisted in papules, which did not develop into vesicles. It was distributed in three groups of firm papules in the course of the left posterior femoral cutaneous nerve; and as this takes its origin from the lumbar plexus, while the injection was in the domain of the sacral plexus, Touton argues that it was reflexly, and not directly, produced by the injection.—*London Lancet*.

USE OF STATIC ELECTRICITY IN GENERAL PRACTICE.—In a paper on this subject, read recently before the Philadelphia County Medical Society, Dr. Andrew Graydon reached the following conclusions:

1. Static electricity is a safe and reliable agent in the general practice of medicine. I do not mean to say that its reliability is of such a nature that its environments are to be neglected. For example, the office in which the instrument stands must not have any dampness about it.

2. This treatment can be applied pleasantly and with benefit to patients, and at times when the galvanic and faradic can not be used.

3. In "static insulation" we get results only attainable from "general galvanization" and

"general faradization," without the expense of time, trouble, and exposure—and frequently, too, after both those forms have failed.

4. In many forms of pain, prompt and permanent relief follows its application, such as is unequaled by other agents.

5. As a tonic in systems overwrought, overdrawn, mental grip slipping away, it performs a very important part. The readiness with which it can be applied, and the good results obtainable, prompt me to make use of its properties frequently.

6. In various forms of headaches its effects are uniformly good. It is a common remark to hear from patients, "I can feel the pain being lifted, the heaviness going," or similar expressions indicative of appreciable relief.

7. In the treatment of insomnia the use of the douche is effective, a feeling of drowsiness making itself felt during its application.

8. In treatment about the head I have found a difference in the effect between the positive and negative poles, not elsewhere.

9. The benefit of the faradic current is obtained from the static inducer.

10. Growth of hair, I have observed, has been promoted, and the falling out of it stopped in some of my cases of head pain.—*Boston Medical and Surgical Journal*.

SALINE INJECTIONS INTO VEINS IN DIABETIC COMA.—The striking case related by Dr. Dickinson at the last meeting of the Clinical Society is somewhat encouraging as to the value of intravenous injection of saline fluids in cases of diabetic coma, although, unfortunately, a fatal issue eventually ensued, for after the first injection (of 106 ounces) the patient regained consciousness to a very complete extent. The importance of such a respite may occasionally be very great; for instance, in the case of one who is attacked with diabetic coma without having made his will. It is something to know that by this method the coma can, temporarily at least, be made to pass away. The subsequent course of Dr. Dickinson's case is equally instructive. The patient relapsed into coma, and resort was again had to the procedure which had already proved of service. But this time the amount of saline fluid received into the circulation was actually more than the estimated average total amount of blood in the adult body. In spite of the state of plethora which so heroic a case must have produced, the patient once more regained consciousness. Dr. Dickinson's conclusions that one hundred or even two hundred ounces of saline fluid may in such cases be introduced into the circulation with advantage, but that the benefit to be gained thereby can only be

temporary, were doubtless justified by the experience in this case. Perhaps the same end might be obtained more rapidly if the injection were preceded by venesection, so as to secure a greater degree of dilution of the blood with a comparatively small amount of the diluent. The practice of saline injections in diabetic coma has, as Dr. S. Mackenzie remarked, been frequently employed, but, so far as we know, in no case with permanent good results. Indeed, few patients submitted to this treatment have, as in Dr. Dickinson's case, regained consciousness even for a short time.—*London Lancet*.

COMEDONES.—For the removal of "black heads" or comedones, Dr. Unna used the following application:

China clay.....4 parts.
Glycerine.....3 "
Acetic acid.....2 "
Perfume, sufficient.

The parts affected should be covered with this ointment in the evening, and, if necessary, during the day. After several days all the comedones can be easily expressed, most of them coming out on washing the parts with pumice stone soap.

Another entirely different treatment is proposed by Dr. McCahey, who, having noticed that comedones were easily pressed out of the skin of a patient who had been under the influence of ether, devised the following mixture, which he used in several cases with success:

Ether.....f 3 j;
Carbonate ammonium.....gr. xx;
Water, to make.....f 3 ij.

The liquid was applied to the affected parts twice a day.—*Druggists' Circular*.

THROMBOSIS IN THE CHLOROTIC STATE.—M. Vergely, in a thesis (summarized in *Centralbl. f. Allg. Path.*, No. 5) upon Venous and Arterial Thrombosis in the Course of Chlorosis, points out that this complication often arises early in the disease. He reports fourteen cases of venous thrombosis—in nine spontaneous, in three after overexertion, and in one iliac thrombosis was attributable to distension of the sigmoid flexure. In eight cases the thrombus was symmetrical; in four cases the thigh was the seat of the plugged vein; in seven the calf. But arterial thrombosis also occurs in this disease; at least, it has been noted in the pulmonary and Sylvian arteries. It does not appear that mention is made of thrombosis of the cerebral sinuses, which is also well known to occur in the chlorotic. The

cause of such spontaneous thrombosis is referable to an increased tendency of the blood to coagulate, and also, perhaps, to the altered nutrition of the vessel walls. The latter factor is supported by Virchow's discovery of fatty degeneration in the intima of the aorta in chlorosis. But in the two cases related by Vergely, where the middle cerebral artery was thrombosed, no histological changes could be detected in the blood-vessel, although it is thought that slight endothelial lesions might have passed undetected. Certainly there is much yet to learn concerning the etiology of spontaneous thrombosis.—*London Lancet*.

MASSAGE IN PAINFUL FLAT-FOOT.—In a paper on this mode of treatment by Dr. A. Landerer, the writer says that his observations go to show that the muscular system is necessary for the preservation of the bodily form. He believes the normal tension and activity of the muscles to be the great cause in preventing alteration in structure. Bandages alone without the help of muscles can not avert deformity. This is seen in the case of the origin of paralytic club-foot. The appliances may be accurately adjusted, while at the same time the whole cause of the mischief may lie in the deficient tensions of the muscles not counteracting the weight of the body. In flat-foot one must seek to strengthen by massage all those muscles which are concerned in the support and preservation of the arch of the foot. These are in the first place the tibialis posticus, triceps suræ, and small muscles of the sole, which, by their contraction, hold the piers of the arch. The method of massage is as follows: To begin with, the region of the tibialis posticus is forcibly tapped, then the triceps suræ and the sole muscles. Thereafter the same parts are powerfully kneaded with pliant grasp, and finally the foot and leg are rubbed centripetally. The painful points are at first gently and then more strongly pressed and rubbed. Landerer has, in accordance with his view of the mechanism of flat-foot, treated the muscles alone, and quotes eight cases of excellent result. In some the form of the foot altered, a certain arching taking place, resembling closely the natural shape.—*Berlin. klin. Wochensh.*

CULTURE OF VACCINE VIRUS.—A Russian physician has succeeded in cultivating vaccine virus, and finds that the virus, artificially cultivated, is as effective as the genuine, and has the advantage of absolute purity, so that its use involves no danger from scrofula, tuberculosis or other constitutional diseases.—*The Pacific Record*.

INJURIES OF THE BLADDER DURING LAPAROTOMY.—A. Reeves Jackson, M. D., of Chicago, has collected sixty-seven cases of injury of the bladder during the performance of laparotomy among forty-one operators, and thinks that this list is sufficiently large to show that the accident is by no means infrequent.

Considering the conditions under which bladder injuries may happen during laparotomy, it is not discreditable to any surgeon to meet with them, for they may not be due to any carelessness or lack of skill on his part. In many of the foregoing cases no possible degree of diligence could have averted the accident. Adhesions of the peritoneal surface of the elongated bladder to that of the anterior abdominal wall frequently can not be known in advance, and their existence is only demonstrable after the viscus has been opened. The use of the catheter as a diagnostic means is not always available, because the compression of the bladder against the pubis may prevent the introduction of the instrument beyond that point. Certainly, however, this should always be attempted in any case of suspected difficulty, and would seem to be even a proper and unobjectionable routine method.

Another useful precaution is, to avoid prolonging the abdominal incision far down toward the pubic bone until the opening into the peritoneum has permitted the relations of the bladder to be ascertained.

The mortality of the cases in which the bladder has been wounded is large, namely, about thirty per cent; but this is due to the complicated and serious character of the cases in which the accident has occurred, the consequently increased length of the operation, and the greater danger from shock, rather than to the mere vesical injury.

Inasmuch as the bladder is recognizable with more difficulty when empty than when full, it would be better, in cases presenting doubtful features, to commence the operation with the viscus wholly or partly distended. When its position has become known, after the completion of the abdominal incision, it may be emptied by an assistant.

Treatment: When it is known at the time of operation that the bladder has been cut or torn, the opening should be at once closed with a continuous suture of catgut or fine silk, taking so as to invert the edges of the wound and bring together the peritoneal surfaces. A permanent catheter ought to be used during the first two days. After the expiration of that time its constant use is usually unnecessary; and if the wound has been small—less than one inch in length—the instrument may be subsequently dispensed with. If, however, the wound has

been large—exceeding two or three inches—the bladder ought to be artificially emptied as often as every three hours during three or four days additional. The catheter should be used so long as the urine contains blood.

In the cases in which urine appears through the abdominal wound subsequently to the operation, at a time and under circumstances which might make it dangerous or inexpedient to reach the seat of the vesical injury, the catheter ought to be used either continuously or at short intervals, for the purpose of lessening the amount of urine which escapes through the fistula, and thus aid in the closure of the latter. If, however, the fistulous opening should show no disposition to close after two or three months, the edges ought to be freshened to the depth of half an inch or more and stitched together.

In exceptional instances it may be expedient to affix the edges of the wounded bladder within those of the abdominal incision, in the manner detailed by Thomas and others; but as this method must interfere, to some extent, with the subsequent contractility of the bladder, it is not to be commended as a usual practice. The suturing and “dropping” of the vesical wound is the better method.—*Journ. Americ. Medic. Associat.*, February 22, 1890.

RADICAL CURE OF VARICOSE VEINS BY MULTIPLE LIGATION.—Dr. Phelps applies subcutaneously a large number of ligations to a single vein, by means of a Keyes-Reverdin needle. The operation is indicated in the following cases:

1. When this condition constitutes disability in physical examination—as for admission to the army or navy, or for appointment in a municipal department.

2. When the size of the veins, the formation of venous tumors, or the attenuation of the coats or tegumentary covering threaten hemorrhage.

3. When chronic ulceration or eczema exists.

4. When the circulation has been so far impaired as to occasion swelling of the feet or loss of power in the limb.—*New York Medical Journal*.

GONORRHEAL INFLAMMATION OF THE EYE.—Kemény (*Centr. Bl. für Bak. und Parasitenkunde*) reports a case of accidental auto-infection of the right eye with gonorrheal virus in the person of a soldier, who was suffering at the time from acute gonorrhea. Actual proof of the character of the conjunctival inflammation was furnished by the discovery of gonococci in the secretion. The gonococci were found, as in urethral gonorrhea, in the protoplasm of the pus corpuscles.

The American Practitioner and News

"NEC TENUI PENNÂ."

Vol. IX. SATURDAY, APRIL 12, 1890. No. 8.

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H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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MEDICAL ASPECTS OF THE TORNADO.

As every body knows by this time, the city of Louisville was visited, on the night of March 27th, by what is probably the most destructive tornado on record. A path nearly two miles long and about one fifth of a mile in width was cut diagonally through a thickly populated portion of the city, with a destruction of property that must be seen to be realized. But great as this destruction of property was, it is less remarkable than the light list of casualties incident upon the storm. If the horrors of Falls City Hall, where some two hundred people had assembled for lodge meetings and a dance, and the casualties at Main Street, between Seventh and Eighth, where a building containing a saloon, a cigar store, and sleeping apartments for the servants of a hotel, went to the ground, could be eliminated, the list of deaths and injuries would have been no greater than is often reported after a similar sweep of a tornado through a country town. Of course this was largely due to the hour of the day when the storm broke upon the city. At 8:30 o'clock in the evening the schools, the factories, the warehouses, and the business houses were deserted, and many casualties were thus averted; but the four or five hundred dwellings that went down contained the wonted

number of occupants, and it is simply marvelous that the death list among these should not have exceeded eight or ten. This low list of casualties is doubtless due to the fact that under the force of the wind the houses as a rule exploded, the walls falling almost invariably outward.

At the two places above named, where buildings went down upon many occupants, the damage done to life and limb was appalling, and from the list, as presented by the coroner, some facts of surgical interest may be gleaned.

The total number of deaths was seventy-five, and of the wounded two hundred and fifty. In the case of the former, death was caused by injuries which in the order of frequency may be thus arranged:

1. Crushing of the thorax, with injury of the heart and lungs.
2. Fracture of the skull, with injury of the brain.
3. Suffocation.
4. Compound and comminuted fractures of the extremities, with resulting hemorrhage.
5. Shock.
6. A few were burned to death.

Another remarkable feature of the disaster is that two only of the injured have since died. This, in view of the great number of compound fractures sustained by the sufferers, is a noteworthy fact, and bears conclusive testimony to the efficiency of antiseptic surgery.

No medical institutions were in the track of the storm. The morgues were well filled, but the hospitals were in no case overcrowded, since few of the people injured were without homes situated out of the fatal track, where they were carried and received the needed attention.

It need not be stated that, as soon as the knowledge of the calamity came to their ears, physicians in large numbers went to the points where their services were needed, where they were untiring in their ministrations to the sufferers, some of them remaining at the scene of greatest destruction of life and limb, without rest and without refreshment, for from twenty-four to forty-eight hours. We say that this need not be recorded, because the physician is always and everywhere,

in the time of public calamity, foremost among the helpers—a work which he does always from a sense of duty without thought of emolument, and for which he is entitled to no especial praise.

One other feature of the storm remains to be noted. For some hours preceding the tornado the barometer showed the lowest reading ever recorded by the signal service in this district. In consequence of this, many of the sick, the delicate, and the overworked complained of undue depression, for which malaria in not a few instances got undue credit.

Notes and Queries.

THE BRITISH MEDICAL JOURNAL of March 8th publishes a picture of the home of Ephraim McDowell, the place where the first ovariectomy was done, with the following quotation from a lecture by Sir Spencer Wells, who some years since paid this graceful tribute to the memory of the father of ovariectomy:

“McDowell was wise, practical, and prophetic. He carefully studied the subject which filled his mind, did with an enviable success what his opportunities permitted, and looked with an anxious eye on the prospect opening up to his successors. We, more happy in our opportunities, have entered into full possession of what to him was little more than a promised land; and, speaking personally, I feel it my greatest happiness to have been able, chiefly through the encouragement of professional brethren (which at one time I had little reason to anticipate), to reach the point at which McDowell aimed. I have not only obtained the amount of operative success which he gave as the standard; I have not only the almost daily gratification of seeing some living and enduring evidences that my labors have not been in vain; but I have for the rest of my days the satisfaction of knowing that my example has emboldened others, and will be the means of still further extending to human suffering the consolatory assurance of the prospect of relief, and insuring the certainty of its realization by the many skillful hands which are now betaking themselves to the work. This is a lot which falls to but few in-

novators. It is not given to every one to see the fruit of his labors; but the surest way of gaining that end is by studying the words and following the counsels of wisdom. The wish to do well what others have done is not all that is wanted. Step by step their course must be followed, difficult still, but somewhat easier from the result of experience; and while I content myself with a warning to aspirants that a fancied inspiration will not alone carry them on to success, I feel I can not quit them and the subject better than by repeating the words of McDowell, who, though better known in the open rugged field of practice than in the paths of literature, was a man of broad and elevated views, and thus expressed the advanced opinions he had already formed respecting the operation he had inaugurated after years of patient waiting and zealous preparation. He strove to make ovariectomy a boon to humanity. He had reason to believe it had proved so, but he foresaw the dangers of its abuse from rash and indiscriminate rivalry among his followers.”

We have reproduced this eulogy upon McDowell because we are now able to present our readers with a drawing of his Kentucky home, which was forwarded with an interesting letter to Sir Spencer Wells by Dr. Dunlap, of Danville, Kentucky.

Dr. Dunlap writes: “I take pleasure in sending you by this post a photograph, which I am sure you will, above all men in the world, enjoying owning. It is the home where Ephraim McDowell lived for many years, and the small brick room in the foreground and to the left of the large building is the one in which the first ovariectomy was performed. The small room to the right, just beyond the man leaning on the cane, was the consulting room and office of Dr. McDowell. Time has wrought many changes, and the home is now in the possession of the lowest class of negroes, our former slaves. It is the haunt of thieves and law breakers, and the center of most of the lawlessness in our village. It will soon go down, however, before the march of western progress, and I am determined that so historic a spot shall not be entirely lost. I have a deep and lasting pride and interest in all that pertains to the

early history of the operation which you, more than any man living, have brought to its present state of perfection. I wish to assure you of the kind feelings entertained for you by the ovariologists of the United States, and for them express the wish that you may be spared yet many days of happiness and usefulness."

It is always pleasant to see the work of British surgeons and of our associates gracefully acknowledged by foreigners, and especially by our American brethren, and our friends across the Atlantic are ever ready to return our appreciation of their work. We trust this British tribute to the memory of the "Father of Ovariotomy" may be accepted as some slight addition to agreeable acts of international fraternity.

THE SUPPRESSION OF RABIES.—Dr. G. Fleming contributes to the current issue of the *Nineteenth Century* an interesting and sensible plea for the introduction of measures for the suppression of rabies in this country, the case being stated in a manner which ought to convince the most skeptical. He begins with a brief historical survey of the prevalence of rabies in different parts of the world, and especially in these islands, quoting from old chronicles to show that it was not unknown in the eleventh century. The aims of the medieval physicians were directed to the cure of the disease, and not to its prevention; but experience in this present century has shown that whenever police measures have been enforced the ravages of rabies have been checked. Dr. Fleming asserts that the three reasons for the existence of rabies in this country are: (1) A defective sanitary organization for dealing with the contagious diseases of animals; (2) ignorance and apathy on the part of the public; and (3) a spurious sentiment of humanity with regard to dogs. He is very severe and caustic in his treatment of those who entertain the last-named views—the "cynophilists," as he terms them—and contrasts the treatment to which civilized and cultured humanity subjects the horse with the tenderness shown toward the dog, who must not even be suffered to bear the slight inconvenience of the muzzle. For, as he well shows, there is no doubt that

rabies can be suppressed by restrictive measures, including muzzling, registration, and licensing, with a sufficiently high dog tax, the destruction of stray dogs, and an efficient quarantine. Such measures would, if carried out for twelve months, rid this country of the disorder, and all fear of further attacks would be averted by maintaining the quarantine regulations. They can not, however, be left to local authorities, but only be satisfactorily carried out by the central government; while if adopted they would do away with the need for recourse to Pasteurian prophylaxis, and indeed also with the necessity of muzzling.—*London Lancet*.

THE LEPER HOSPITAL AT HAVANA.—In the *Nashville American* of March 3d is a communication from Dr. Walter Duke, describing a visit lately made by him to a leper hospital at Havana, from which we print a brief extract. The hospital is the San Lazaro, located in the northwestern suburbs of Havana.

"This hospital, at the time of our visit, had been in active existence somewhat over one hundred years, and during all that time had not lacked for inmates. It was founded by a wealthy Cuban who was himself a victim of the disease, and who, realizing terribly the great need for some such harbor of refuge for those so heavily afflicted, left all his fortune to establish and perpetually sustain this most necessary and worthy charity.

"The building was quadrangular in shape, with quite a large court, upon which opened the doors and windows of the little rooms where in the lepers lived. In this court was a chapel or church in the form of a cross, with its main entrance upon the street outside the hospital. The body of the church was, therefore, accessible from without, and it was used to what seemed an amazing extent by those living near the hospital. The wings were railed off, being reached only from within, and in these the lepers worshiped, the men on one side and the women on the other.

"The hospital is in charge of the Sisters of some order, whose names I did not learn, and the care and nursing of the inmates fell upon them. The medical and surgical attention given the lepers was ably supplied by several

physicians who practiced in the city and whose term of office, compensation, etc., I did not investigate. That they did all that could be done, and that cheerfully and kindly, for those under their care, I can testify from what I saw, and from a conversation I had, through Dr. Burgess as translator, with the physician on duty at the time of our visit. He told me that he had tried many lines of treatment; had even amputated limbs where there seemed some dim hope that the disease was local; had tried dietetic and hygienic measures, baths, etc., with no favorable result. All that could be done, he said, was to make them as comfortable as possible, lessen their suffering, and let the disease proceed with its dreadful work.

"Within the courtyard, with his back toward us, sat a solitary man, who was not, as we soon discovered, either sick enough to be confined to his room nor well enough to be at mass. As we came to him the doctor spoke and he turned toward us, and I see him now as I saw him then. He was apparently blind, his face was terribly disfigured, seamed with scars and swollen with tuberculous masses; his ears were twice the size of ordinary ears, the lobes pendulous, thickened, and heavy; his every feature as far removed as could be from the normal type of healthy manhood; his hands were disfigured and swollen, the fingers mostly gone, with only stumps to show where once they had been; the feet were worse, the right being entirely gone at the ankle, the left devoid of toes.

"When we came down mass was over, and the court yard was filled with some seventy or eighty lepers. They crowded around us somewhat closer than we wished, but no one made any attempt to touch us, for which we were most truly grateful.

"The patients are supplied with tobacco, and, if they use it, are given opium. Most of the inmates are Chinamen and negroes, though many are of Spanish and Cuban descent. One of the smaller West India Islands produced the disease, and several of the cases were from it."

Dr. Dake calls attention to this Cuban hospital as an excellent field for those who believe in Christian science to work in. "Here they would have a chance which could not but be a source of perpetual delight to them, and could

they but succeed in curing the cases, which, of course they could do easily, judging from the literature of their faith, it would suffice to convert an unbelieving world."

INFLUENZA A CONTAGIOUS DISEASE.—The Paris correspondent of the *Therapeutic Gazette* relates that, according to the official report of Dr. d'Hoste, of the transatlantic steamer "Saint-Germain," the ship sailed on December 2, 1889, from St. Nazaire for Vera Cruz. All on board were well, influenza not having yet reached that part of France. On December 5th the steamer called at Santander for passengers, and there received among others a man coming from Madrid, where the epidemic was raging. The passenger, who was well when admitted, fell sick the next day, and soon the contagion spread on board, Dr. d'Hoste being the first to be influenzaed. Out of four hundred and thirty-six passengers, one hundred and fifty-four were sick, with forty-seven of the crew and officers besides. Most of the cases were slight and a few dangerous, but no deaths resulted. From this unique observation the conclusion may clearly be drawn that influenza is a contagious disease, communicable not only through its complications and sequelæ, but by itself before any secondary effects have developed. Such was the opinion expressed before the Academy of Medicine by Dr. Proust, a professor at the Faculty. *Boston Medical and Surgical Journal*.

THE London Lancet, in commenting on a sensational article in the New Castle Daily Leader, says: The basis of the Leader's article purports to be "An Interview with a New Castle Physician," who claimed his own self-righteousness in using a hand-wash of perchloride of mercury (1 in 1000), but expressed the opinion that the majority of medical men do not recognize the danger there is in attending confinements when they have been in connection with infectious cases. We think this an uncharitable and unjust accusation. It is by the efforts of medical men that the mortality of puerperal fever, even in lying-in hospitals, has been reduced to a minimum, and general practitioners are not only well acquainted with the means of personal disinfection.

tion, but have enormous inducements to disinfect in safe ways. There are doubtless careless or even unintelligent men in the profession, as in all other callings, but they are few and far between. The search for a perfect disinfectant is acute and constant, so much so that there is some risk that nurses and others may come to rely on it as to attach a superstitious importance to it, and to forget that, after all, pure air, perfect cleanliness, and personal hygiene in medical man, nurse, and patient are the indispensable conditions of safety. As Mermann will say, an antiseptic douche given with a dirty syringe and dirty fingers may be the very medium of infection. It will be remembered that in a sad series of fatalities last year in London in the hands of a midwife there was reason to believe that the poison originated in suppurative disease in her mouth. The question is one of principle and intelligence rather than detail, and we so far second our contemporary as to note his warning, and at the same time assure him that the profession was never more earnest than in the study of methods to secure the safety of lying-in women.

TENTH INTERNATIONAL MEDICAL CONGRESS, TO BE HELD IN BERLIN, AUGUST 4TH TO 9TH.—The Committee of Organization of the Tenth International Medical Congress, R. Virchow, President; E. von Bergmann, E. Leyden, W. Waldeyer, Vice Presidents; O. Lassar, Secretary General, have appointed the undersigned members of an American Committee for the purpose of enlisting the sympathy and co-operation of the American profession.

We are assured that the medical men of our country will receive a hearty welcome in Berlin. The Congress promises to prove of inestimable value in its educational results, and in securing the ties of international professional brotherhood. It is most important that the American profession should participate both in its labors and its fruits.

Delegates of American Medical Societies and Institutions, and individual members of the profession, will be admitted on equal terms. The undersigned, therefore, beg to express their hope that a large number of the distinguished men of our country will appreciate

both the honor conferred by this cordial invitation and the opportunity afforded us to fitly represent American medicine.

The Congress will be held at Berlin, from the fourth to the ninth of August.

The arrangements in regard to a few general meetings and the main scientific work, which is delegated to the sections, are the same as in former sessions. A medico-scientific exhibition, the programme of which was published a few weeks ago, is to form an ingredient part. It is to the latter that the Berlin Committee is very anxious that both the scientific and the secular press should be requested to give the greatest possible publicity.

The office of the Secretary General is Karlstrasse, 19, N. W., Berlin, Germany.

S. C. Busey, Washington, D. C., Wm. H. Draper, New York, R. H. Fitz, Boston, Mass., H. Hun, Albany, N. Y., A. Jacobi, New York, Wm. T. Lusk, New York, Wm. Osler, Boston, Mass., Wm. Pepper, Philadelphia, Pa., J. Peyre Porcher, Charleston, S. C., J. Stewart, Montreal, Can., Committee.

The following from Dr. Jacobi explains itself:
Editors American Practitioner and News:

In a letter dated Berlin, Karlstrasse, 19, March 22d, Dr. Lassar, the Secretary-General of the Tenth International Congress, directs me to inform the Medical Profession of America that a programme of the Congress and other communications will be distributed two months before the meeting among those who shall have registered previously and received their tickets of membership.

The latter can be obtained by sending application and five dollars to Dr. Bartel, Leipsigerstrasse, 75, Berlin, S. W. By so doing the members will save much crowding and time during the first days of the Congress.

For the American Committee of the Tenth International Medical Congress.

April 7, 1890.

A. JACOBI, M. D.

INTERNATIONAL MEDICAL CONGRESS.—The members of the American Medical Association who will attend the International Medical Congress will please note the following:

The Netherlands American Steam Naviga-

tion Company is the only line approved by the Committee on Foreign Transportation, because this line offers at reduced rates to all the members of the Association and their direct family round-trip ocean-passage in first cabin at \$90 per full ticket in inside rooms, and \$105 per full ticket in outside rooms.

In the Medical Journal of March 8th you will find the whole arrangements made with the Committee.

As our steamers are rapidly filling, and many physicians have already secured their berths, it is strongly recommended to all who intend to go to Europe to secure their berths as early as possible, by remitting us the requisite deposit money of \$10 per adult. The balance of the passage money must be paid at least two weeks prior to sailing.

The first comer gets the best place.

All further information about staterooms, the ocean voyage, or the journey in Europe will be cheerfully furnished on application at the Company's passenger offices, 39 Broadway, New York, and 86 La Salle street, Chicago, Ill.

DIURETIN is the utility name for a new preparation of theobromin, namely, theobromin-natrium-salicylicum, recently imported by Zehn & Fink, of New York.

Theobromin, a constituent of cocoa, is chemically almost identical with caffeine; caffeine is a trimethyl-xanthin, and theobromin is a dimethyl-xanthin. Both caffeine and theobromin act as diuretics, but the latter possesses many advantages in therapeutic application.

During this year's convention of German scientists at Heidelberg, Dr. v. Schroeder, of Strassburg, reported on therapeutic experiments made by Dr. Gram, of Copenhagen, at the local clinic. The results of this investigation were summarized as follows:

1. Theobromin is a diuretic whose therapeutic value is due to direct action on the kidneys, as proved by v. Schroeder for both caffeine and theobromin.

2. The radical difference between theobromin and caffeine lies in the want of theobromin to excite the nerves; and its use is not, therefore, accompanied by sleeplessness, unrest, and similar depressant effects which are caused by

caffeine and make its action uncertain and often harmful.

Theobromin is to a certain extent a caffeine without its depressant nerve effect, while acting fully on the kidneys, and may therefore be termed a pure kidney specific.

3. Theobromin has effected good diuresis in kidney and heart affections, even in cases where digitalis and strophanthus failed to give satisfaction.

4. Pure theobromin is not suitable for use; it is soluble in not less than 1600 parts of water at ordinary temperature, difficultly absorbed by the system, and causes nausea.

Dr. Gram therefore recommends the use of theobromin-natrium salicylicum (diuretin) the use of which he found gave no ill side effects even when administered to very weak patients.

Diuretin is a white powder, soluble in one half its own weight of water when warmed, and remaining dissolved after cooling. The dose is 15 grains, with a maximum total per day of 90 grains.

A PASTEUR INSTITUTE has been opened in New York City by Dr. Paul Gibert for the preventive treatment of hydrophobia and the study of contagious diseases. Dr. Gibert will be assisted by Drs. G. Van Schaick and A. Liautard.

DAMAGE SUIT.—Physicians in the western part of Massachusetts are much interested in the case, lately tried in Springfield, of Homer C. Ross against Dr. Wallace H. Dean, of Blandford. The plaintiff asserted that he had lost the use of an arm because it was improperly set by Dr. Dean after it was broken in an accident. But the best known doctors of the vicinity testified that the treatment was all right, and that the arm could be used. Dr. Francis Bacon, of New Haven, extended the man's arms and held them up for a time, when he suddenly stopped supporting them. The fact that they remained extended long enough to exhibit the absence of paralysis was conclusive. The result was, that Judge Barker instructed the jury to bring in a verdict for Dr. Dean without leaving their seats.—*Boston Medical and Surgical Journal*.

REVISION OF THE UNITED STATES PHARMACOPEIA: OFFICIAL ANNOUNCEMENT.—The convention for the revision of the United States Pharmacopeia will be held in the city of Washington, May 7, 1890, at noon. As it is necessary that some preliminary arrangements should be prepared in advance of the convention, I have taken upon myself the responsibility of appointing the following delegates to act as a Committee of Arrangements: Dr. Samuel C. Busey, Dr. C. H. A. Kleinschmidt, Dr. Robert T. Edes, of Washington; Mr. P. W. Bedford, of New York, and a committee appointed by the National College of Pharmacy of the following members: W. S. Thompson, J. A. Milburn, and S. E. Waggaman, M. D. As soon as arrangements are completed a circular will be mailed to each organization whose credentials are received by me before April 10th, and to any delegate who will forward his address on a stamped envelope inclosed to me. Robert Amory, President Convention, 1880.

ANNOUNCEMENT.—Beginning with the issue for March, 1890, the *Annals of Gynecology*, formerly published in Boston, was enlarged and improved, and a Department of Pediatrics added, under the editorship of Dr. Louis Starr, of Philadelphia, formerly Professor of Diseases of Children at the University of Pennsylvania, author of "Hygiene of the Nursery," associate editor of "Pepper's System of Medicine," Physician to the Children's Hospital, and author of "Diseases of the Digestive Organs." The journal is now published by the University of Pennsylvania Press, Philadelphia, under the name *Annals of Gynecology and Pediatrics*. Dr. E. W. Cushing, of Boston, who has recently become surgeon of the Woman's Charity Club Hospital for Women, continues to edit the Department of Gynecology.

WESTERN PENNSYLVANIA MEDICAL COLLEGE.—The Fourth Annual Commencement Exercises of the Western Pennsylvania Medical College were held in the Grand Opera House, Pittsburgh, on March 27th. The degree of M. D. was conferred on twenty-nine graduates, being about twenty-five per cent of the class in attendance during the past term.

In the evening of the same day the Alumni Association of the college, now numbering one hundred and twenty, was entertained by the Faculty at a banquet provided at the Seventh Avenue Hotel.

THE FIRST VICE-PRESIDENT OF THE AMERICAN MEDICAL ASSOCIATION DEAD.—John W. Jackson, M. D., who was the first Vice-President of the American Medical Association, died at Kansas City, March 13th, of embolic pneumonia resulting from pyæmia, at the age of fifty-eight. He was the chief surgeon of the Wabash railway system, and last year was President of the National Association of Railway Surgeons.

J. M. RITTER, M. D., Richmond, Ia., says: My experience with S. H. Kennedy's Extract of *Pinus Canadensis* has been highly satisfactory, especially in the treatment of gonorrhœa and gleet. In these lesions I regard S. H. Kennedy's Extract of *Pinus Canadensis* as the remedy *par excellence*. In one obstinate case of gleet, particularly, I obtained the very best results from the remedy as an injection. The case was one of six months' standing; the patient had consulted other physicians, but with negative results. I prescribed the *Pinus Canadensis* (white) as an injection, properly diluted. The malady yielded immediately, the discharge lessened, and finally yielded entirely, to the great delight of the patient.

OTTO BECKER, the distinguished ophthalmologist at Heidelberg, died recently at the age of sixty-one.

THE nervous debility quacks of England have fallen upon evil times. The first prosecution of one of them under the new Indecent Advertisement Act took place recently in Bristol, where a man was charged with advertising "Dr. Lily's vital tonic, the restorer of vitality, cures nervous debility, losses, etc.," there being no such registered person as "Dr. Lily." The defendant was also fined ten shillings for the indecent advertisement, £10 for practicing and representing him-self to be a medical practitioner.

THE following story is told by a New York physician of the late Willard Parker :

"When Dr. Parker was just beginning his famous career he was sent for by a rich but avaricious man who had dislocated his jaw. The young surgeon promptly put the member in place. 'What is your bill, doctor?' asked the patient. 'Fifty dollars, sir.' 'Great heaven!' And the man opened his mouth so wide as to dislocate his jaw a second time. Dr. Parker again put things to rights. 'What did you say your bill was?' again asked the patient. 'I said it was \$50; now it is \$100.' The man grumbled, but paid it."

THE STATE SOCIETY.—The Kentucky State Medical Society will meet at Henderson, May 14, 1890. From latest advices it appears that a programme of unusual interest has been prepared, while full arrangements have been made by the profession and citizens of our sister city for giving the delegates a warm welcome.

MEDICAL LEGISLATION IN ALABAMA AND FLORIDA.—The Medical Practice Act of Alabama has been found to be ineffective for the prosecution of illegal practitioners, by reason of a failure in the enactment to prescribe a penalty. This omission will probably be remedied by the legislature of the current year. The Medical Act for the State of Florida is also said to have a defect, in that it does not specify that an examination in the practice of medicine shall be required of candidates. This oversight it is thought may be obviated by making the examination in therapeutics broad enough to embrace the omitted branch.—*Journal American Medical Association*.

SICKLY CHILDREN AT TWO DOLLARS.—When Stanley's expedition reached Usamiro, the station of Missionary Mackay, on the south shore of the Victoria Nyanza, the sick list was so heavy that a halt for rest was imperative. Mr. Mackay soon found that the feeble and sick children were being bought up by the natives for two goats apiece, so that he was led to purchase about twenty-five weak children, "on Mission account," to save them from slavery. To use his own words, "The amount I have paid is two dollars per head."

NEW YORK BENEFACTENCE.—The returns from the annual hospital Saturday and Sunday collections for 1889, in the city of New York, which are probably very nearly complete, amount, up to the present time, to \$57,021, thus making the largest collection ever made. In 1879, the year in which the collection was started, \$26,465 was received; in 1880, \$44,535; in 1885, \$46,035; in 1886, \$53,051; in 1887, \$50,449, and in 1888, \$52,039.

AMERICAN MEDICAL ASSOCIATION.—The forty-first annual session will be held in Nashville, Tenn., on Tuesday, Wednesday, Thursday, and Friday, May 20th, 21st, 22d, and 23d, commencing on Tuesday at 11 A. M. The addresses will be given on "General Medicine," by Dr. N. S. Davis, Chicago, Ill.; "General Surgery," by Dr. Samuel Logan, New Orleans, La.; "State Medicine," by Dr. Alfred L. Carroll, New York, N. Y.

A FORTUNE FROM ANTIPYRIN.—Dr. Knorr, the discoverer of antipyrin, has found a mine of wealth in the late epidemic of influenza, having taken in, by means of his royalties, considerably more than a million of dollars. He gets sixty cents on every ounce produced, and the drug sells at \$1.40 per ounce. This, if true, would indicate a consumption of not less than forty tons of the article by the victims of *la grippe*.

DR. MICHAEL FOSTER has been elected a member of the Italian Reale Accademia dei Lincei in the Section of Physical, Mathematical, and Natural Sciences. Among the other foreign members elected at the same time were M. Berthelot, Dr. A. Chauveau, and Prof. Karl von Nägeli, and W. Kühne.

THE newly recommended ferruginous tonie hemoglobin, announced by the pharmacists, is somewhat expensive. Deschiens recommends the following formula: Hemoglobin, 100 grams, syrup, *q. s.* to make one liter. At the rate which American druggists charge for it in prescriptions (five cents a grain) the above prescription would cost just \$75 for the hemoglobin, to say nothing of the syrup.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., APRIL 26, 1890.

No. 9.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we would downright facts at present more than any thing else.—RUSKIN.

Original Articles.

A CASE OF PURULENT EXUDATIVE PERITONITIS.

Illustrating the Possibilities of Laparotomy.

BY E. J. KEMPF, M. D.

L. K., a married lady, twenty-eight years old, of ordinarily good health, the mother of three children, had an attack of remittent fever, followed by an abortion. She had no physician before I was called in. I found the patient pale and weak from loss of blood; her temperature was 103° F., pulse 120; she complained of pain in the back and also of pain in urinating; her abdomen was swollen and tender, and there was a whitish, bad-smelling discharge from the vagina. I washed out the vagina with a hot 1 to 4,000 corrosive-sublimate solution, and then curetted the cavity of the uterus with a dull curette. Shreds of membrane and clots of blood came away. I then washed out the uterus with diluted tincture of iodine, after which I applied a tampon of glycerine on borated cotton. The uterus seemed excessively tender and swollen, and I have no doubt that it was in a state of inflammation; the vaginal vault was hard; the abdomen was tender, especially on the right side, and there was slight tympanites. For these symptoms I prescribed hot applications to the abdomen, and antifebrine, morphine, quinine, and calomel internally. The hot vaginal injections and glycerine tampons were used twice a day for a week, when, the acute symptoms subsiding, the fever disappearing,

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and the patient getting better, I directed the hot vaginal injections to be used once a day.

Afterward I treated the patient with glycerine tampons for six months, when the treatment was discontinued, as the patient seemed well, could do her work, and was as strong as ever.

One year after the first illness my patient became very ill almost suddenly. She had a chill, followed by a fever. Her pulse was 120, full and bounding; her abdomen was tympanitic and excessively tender; she had great pain in her abdomen, in the uterus, and in the pelvis; there was a discharge of dark blood from the uterus; the vaginal vault was as hard as a board, and there was great pain in the posterior part of the vaginal vault. I used the same treatment as in the first attack. My patient, however, got worse and worse, and seemed very sick. The pain spread over the whole abdomen and was intense. The tympanites or swelling of the abdomen became enormous; the temperature ranged from 100° F. to 104° F.; pulse was generally from 140 to 150, very frequent, small and hard; consciousness remained almost painfully clear; the tongue was furred, red, and very dry; a bitter, disagreeable taste was complained of, and the breath was foul; the facial expression was one of great anxiety, the eyeballs seemed to have fallen back into the head, the nose was pinched and the edges were waxy, and the voice was weak and irritable; the irritability of the stomach was very great, there was instant rejection of every thing that she took except milk and lime-water, so that I had to give the morphine hypodermically; the bowels were constipated; the urine was high-colored; the belly was smooth and regular and intensely tender, and a full tympanitic note was found on percussion.

This state of affairs continued with little variation for eighteen days, and I wondered why my patient did not die. I was almost constantly in attendance and continually urged a laparotomy, which was obstinately refused.

The case assumed a chronic form and the patient was slowly succumbing to septicemia. She no longer cared what was done to her, and I obtained the consent of her husband and family to perform a laparotomy upon the dying patient, who was upon the point of collapse.

With the assistance of Drs. M. Kempf and J. P. Salb I performed the following operation: I gave the patient an ounce of whisky by mouth, and one half grain morphine (she was accustomed to the drug) and $\frac{1}{120}$ grain of atropine hypodermically. We then lifted her on to a table properly prepared with oil-cloths, blankets, and sheets, and put her under the influence of the A. E. C. mixture. I shaved her abdomen and the pubic region, then washed off the abdomen with soap and water, afterward with corrosive sublimate solution 1 to 1,000, covering the parts with cloths soaked in the same solution. Then, having prepared our instruments, sutures, ligatures, towels, drainage-tubes, and sponges in as aseptic a manner as we could, I made an incision four inches in length in the median line above the pubis down to the peritoneum. The peritoneum was of a grayish-yellow color, and injected to an intense degree; in fact it resembled a lot of plastic lymph held together by loose tissue. It was intensely friable, and I broke it through with the handle of the scalpel, when a thin, turbid, purulent fluid poured out. By means of an aspirator syringe we drew off fully two gallons of the liquid, which contained a large quantity of floating masses that seemed to be pus cells and flakes of lymph. After the abdomen was emptied of this fluid and the walls of the abdomen sank down to their normal level, I poured about two gallons of 1 to 20,000 corrosive-sublimate solution into the abdomen by means of a fountain syringe, washing out the abdomen thoroughly until the fluid came away clear.

I then made a thorough exploration of the abdomen with my finger. The peritoneum seemed gangrenous as far as I could examine

it; the organs of the pelvis, the intestines, and the omentum seemed inextricably matted together. I had about made up my mind to attempt the removal of the tubes and ovaries, which Dr. Salb counseled me to do, when the patient went into a state of collapse. Realizing that the patient's life hung by a thread, and that at best the case was a hopeless one, and fearing that she would die during the operation if I persisted, I concluded to make an end of the present operation. Accordingly I again flushed the abdomen with the corrosive-sublimate solution 1 to 20,000, and then put in two deep silver sutures and four silk sutures. Between these sutures I placed three large rubber drainage-tubes, one fully nine inches long, which I coiled into the pelvis. After closing the wound I applied iodoform powder, over this borated cotton several layers thick, next a sheet of oil-silk, then a piece of linen, retaining the whole by a broad bandage. We now put the patient to bed, gave her one ounce of whisky, and applied hot water bottles to her whole body. She vomited the whisky. For twenty-four hours I allowed her nothing but cracked ice.

On the next day I found my patient a shade better. The vomiting had disappeared, the temperature was 98° F., the pulse 80 and not so wiry, the anxious expression of the face was less marked, the eyes did not look so hollow, and the patient even tried to smile. The dressing was completely soaked and had a very bad smell. I placed the patient on the table as during the operation, removed the dressings, and flushed the abdomen with a 1 to 2,000 corrosive-sublimate solution, using about four gallons of the fluid. There was a good deal of pus on the cotton, and therefore I let run about a gallon of boiled distilled water into the abdomen through the tubes, very nearly all of which escaped in a short time. I then put on the dressing as before.

On the fourth day I removed one of the silver sutures and two silk sutures, as they were causing suppuration in their tract. This left quite an opening into the abdomen, through which a mass of necrosed tissue, very friable, bulged out. I now took all the sutures out, and the wound opened, letting out the mass of necrosed tissue, which I found readily detect-

able. Taking hold of it with a dressing forceps I made mild traction and removed the entire mass. It came away in five pieces, the last one being the largest, it seeming to be rolled up. The masses filled a tin pint-cup.

It could have been nothing but peritoneum thrown off.

I now removed two drainage-tubes, and left in the long one, after which I closed the wound with S. & J.'s rubber adhesive strips, and redressed it as formerly.

After this there was hardly any discharge, but I continued to wash the wound and external part of the abdomen for two weeks. At this time I removed the last drainage-tube.

The woman made an uninterrupted recovery, and is now able to sit up. She has gained fifty pounds, and considers herself all right. She will not now consent to an operation for the removal of the diseased tubes and ovaries (?), but promises to do so if she gets a back-set. I have an idea that it will prove a tough job on account of the matting together of the parts.

Remarks. From the history of the case, I take it for granted that during the woman's first illness there became encapsuled an abscess in the fallopian tube of the right side, which I failed to detect, and which caused the woman no particular ill health, so that she considered herself, though an invalid, not in any danger. A rupture of this abscess, or perhaps cyst, brought on the general peritonitis.

I lay no pretensions to being a laparotomist or even a surgeon, therefore I will not presume too much for my case. A country practitioner has few books, few journals, and little chance to consult men experienced in abdominal matters, so I may be pardoned if I did not do more for my case. I did the best I could, and circumstances prevented me from placing the case in more experienced hands.

I reported the case because I think it illustrates the possibilities of laparotomy in peritonitis, and that we should let no patient die without giving her the chance.

JASPER, IND.

CASE OF SEPTICEMIA RESULTING FROM ABORTION AND RETAINED PLACENTA.*

BY T. B. GREENLEY, M. D.

On the 27th of November, 1889, I was called in consultation to see Mrs. G., of Jefferson County. Dr. Huber, of said county, was in attendance. From him I learned the history of the case up to this time. On the 22d the patient first felt unwell, having chilly sensations, and took several doses of quinine, but had no positive labor pains until Sunday, the 24th, when she sent for Dr. H. That evening the fetus was expelled, but the secundines were retained. From the doctor's description of the size of the fetus, I judged it to have been in the fourth month of gestation. The mother was unable to give any correct account of her pregnancy, owing to the fact that she was nursing an eight-months-old baby and was not aware of her condition until a short time before the abortion occurred.

On Monday the chilly sensations, alternating with hot flashes succeeded by perspiration, increased in severity, her temperature rising and falling accordingly. There was scarcely any hemorrhage. The discharge was somewhat fetid in odor.

The doctor prescribed quinine and morphia. Temperature 100.5°; pulse 92.

Tuesday, 26th: Symptoms pretty much the same, except the rigors somewhat more pronounced, followed by exacerbations of heat and perspiration. Temperature 100.5°; pulse 92. This temperature and pulse-rate existed as about the average between the paroxysms, but was much higher at the time—early of a morning somewhat lower; lochia still offensive to the smell. Treatment continued.

27th: I saw her to-day at noon, and found her condition as follows: Temperature 100.5°. She was comparatively comfortable, there being but little action of the womb; lochial discharge offensive, yielding a putrid odor. On consultation with Dr. H. I proceeded to deliver placenta. This was effected with the finger. The os was partially dilated, sufficiently so to allow the finger to pass without much resistance. By pressing the womb down with my left hand I

AN International Congress for the suppression of the abuse of alcoholic drinks is to meet in Christiania, Norway, September 3 to 5, 1890.

*Read at Hardin County Medical Society, March, 1890.

was enabled to pass my finger around the placenta, but on attempting to extract it my finger pulled through it, on account of its decomposed condition. I now extracted it by piecemeal, and after getting all within my reach, for fear there might be some particles remaining, I oiled my hand and passed it into the vagina so as to enable me to reach the fundus and remove all the debris. I now thoroughly washed out the womb with carbolic-acid solution, 1-100, until it returned clear. This was again repeated that evening. The placenta was entirely putrid and very offensive to the sense of smell.

About two hours after the placenta was extracted the patient had a severe rigor, lasting a half hour, which was followed by very high reaction—her temperature in less than an hour after the chill being 107.5° ; pulse 140. Gave her five grains antifebrine, and in an hour she was perspiring freely. In three hours the temperature was down to 100.5° , where it was before the paroxysm. During the high fever she was entirely unconscious.

These rigors recurred about two or three times in the twenty-four hours, being always followed by greatly increased temperature and free perspiration. Her temperature was never noticed to be so high as at this time. Treatment continued, with the addition of whisky.

28th: Saw her again to-day. Dr. H. reported symptoms on yesterday to be about as before, with variations of temperature according to frequency of reaction from rigors, stating it to be as low at one time as 99.5° . The lochial discharge to-day is not offensive. There is not, nor has there been, any soreness or tenderness in the region of the womb. At the suggestion of Dr. H., to-day, we put her on solution of sulphite of soda every four to six hours—twenty grains at a dose—still keeping up the other treatment. Between the rigors and reaction she seems to be quite comfortable. Her bowels have been kept soluble with small doses of Rochelle salts. The lowest temperature to-day was 100° , but on reaction from rigors it would rise to 103.5° to 104° .

29th: Had a rigor last night, when fever rose to 103.5° . This morning's temperature 100° . The symptoms to-day are about the same

as heretofore; lochia devoid of odor, no tenderness, some little appetite. Dr. M. Thum saw her to-day. He approved of the treatment being used.

30th: Had a rise of temperature last night; the rigors not now so well pronounced. The symptoms about as heretofore. Treatment continued.

Dec. 1st: Symptoms to-day the same. Treatment continued.

Dec. 3d: Saw her again to-day. No change in her condition noticeable since I left on 1st inst. She still has chilly feelings followed by rise of temperature and perspiration. Her temperature when not affected by the rigors still ranges about 100.5° . No tenderness on pressure over the womb; some appetite; her circulation continues good; pulse 96 to 104. Dr. W. H. Wathen saw her to-day. He approved of the treatment, but thought we might venture an increase of the whisky. His prognosis doubtful.

I remained with her now until her death, which occurred on Saturday night, Dec. 7th. There was but little variation in the symptoms during the last three or four days from those present on the preceding days. The temperature would rise and fall in accordance with the chilly sensations, which seemed to observe no special intervals of time in their occurrence, but would average about twice or three times in twenty-four hours. These sensations toward the last were not so well pronounced, and in fact almost imperceptible, but would always be followed by a palpable rise of temperature which did not so rapidly defervesce as at first. Her temperature would at times be reduced to so near the normal point that I was induced to entertain some hope of her recovery. This was the case on Friday evening, a little more than twenty-four hours before her death, when it was down to 99.5° . But after midnight it began to rise again and continued to do so gradually until just before death, getting as high as 104.5° . I noticed her heart had begun to fail in force in the afternoon on Saturday, some ten hours before the end. She was conscious till within a few hours of the time of her death.

The question perhaps will arise in the minds of some as to the time septicemia supervened.

In my estimation septic toxemia had commenced before the expulsion of the fetus on Saturday, November 24th, for, according to the history of the case, she had chilly feelings on Friday and took quinine for them, thinking she had the chills. These sensations continued Saturday and Sunday. It would perhaps have been better if the placenta had been delivered immediately after the fetus, but in speaking with Dr. Huber on the subject he said it always had been his habit to wait some time for nature to expel it. I know this is the custom of many physicians, especially where there are no urgent symptoms to demand its extraction. But it has always been a rule with me to clean out the womb as soon as possible, both in natural and premature labor, for fear of hemorrhage or septic results; but I have frequently extracted putrid placenta, which had been retained sometimes as long as two weeks, wherein the patients had suffered no toxemic effects. But in instances of this kind we must attribute the exemption of the possession of great powers of resistance on the part of the system to the entrance of septic matter into the circulation.

From the history of the present case I am well satisfied that the vitality of the embryo was destroyed several days before its expulsion. As to treatment I believe every thing was done in the way of remedial agents as well as in diet and nursing that the indications demanded.

Dr. H. saw her every day, and when I could not stay at night he took my place.

Dr. Martin, of Berlin, has of late highly recommended the alcoholic treatment in septicemia. He uses it, he thinks, with better success than he has had with other remedies. We have tried this plan pretty thoroughly in the present case.

The terms septicemia and pyemia have been frequently used synonymously and regarded as meaning the same thing. To a certain extent this is true, as they both imply blood poison; but when we speak of pyemia the mind associates with it the presence of pus, which is taken up by absorption from one locality and carried by means of the lymphatics or veins to another locality, where on account of obstruction an abscess is formed. On the other hand, septicemia consists of some morbid ele-

ment circulating in the blood, which also may have been taken up by the veins or absorbents.

Pyemia usually results from the absorption of unhealthy pus from some suppurating surface or abscess. Septicemia is commonly the result of absorption of putrid matter, becoming so by being retained in the womb after parturition or abortion. This generally consists of blood clots or portions of the secundines. The difference, then, between the morbid material entering the circulation and producing the two diseases consists in the difference between unhealthy pus and putrid matter not due to inflammatory action and suppuration.

It is a question with pathologists as to the mode by which these morbid matters enter the circulation, some contending that it is through the veins, and others the lymphatics.

From the fact that septicemia usually sets up within three days after labor or abortion, it seems manifest it must be through the veins entering the uterus at the right of the placenta that the morbid matter enters the circulation.

In case of pyemia resulting from amputation, could not pus be carried into the circulation in the same manner? But the pus cells being larger than any part of the fluid putrid matter resulting from decomposed debris in the womb, it is arrested in the capillaries of the lungs and eventuates in inflammation and abscesses of those organs. This would seem to account for their involvement in nearly all cases of pyemia. Out of 203 fatal cases collected by Mr. Bryant at Guy's Hospital, 186, or over 91 per cent, affected the lungs. In 78 cases these organs were alone involved. According to these facts the hypothesis that the morbid matter enters the system through the veins would seem to be verified. We however frequently have trouble somewhat of this character in the lungs from embolism of the pulmonary artery resulting from broken-down thrombi. If the embolus involves the larger portion of the artery we may have sudden death from asphyxia; or, if the radicles only are involved, will have abscess similar to that of pyemia. On the other hand if the morbid matter is taken up by the lymphatics, it would seem we should have lymphatic adenitis and suppuration more frequently than we do.

The most prominent symptoms in pyemia are described to be rigors with sudden rise and fall of temperature accompanied with perspiration. According to Playfair we have no such sudden changes in this regard in septicemia, but much more gradual, and as a rule without pronounced rigors. He says in severe cases we have the temperature getting as high as 104° to 106° F., accompanied with small, quick pulse, running up as high as 140; also, as a rule, considerable tympany with diarrhea and vomiting. This set of symptoms differs very materially from those present in the case herein reported. In this case rigors or chilly sensations were the first symptoms manifested, so much so as to induce the patient to take quinine, thinking she had chills. This symptom, followed by sudden rise of temperature and rapid defervescence, was the most prominent throughout the progress of the case, but becoming less pronounced toward the last. I never noticed her pulse to be over 120 except on one occasion, and that was when her temperature was 107.5°. There was no tenderness or tympanites nor any nausea to speak of. She was conscious at all times except a very short time when her temperature was so very high and about two hours before death.

Now the question may be asked, could this have been a case of septicemia when the symptoms differ so materially from those laid down by so prominent a man as Playfair? I can only answer on the ground that she was sick from the same cause that ordinarily produced that disease, together with the fact that these able physicians concurred in the opinion aside from myself.

WEST POINT, KY.

A REPORT OF TWO DIFFICULT OVARIOTOMIES.*

BY J. J. BUCHANAN, M. D.

The three specimens of ovarian cyst which I present for examination represent two ovariectomies which were interesting by reason of the difficulties of their execution, and in one instance the unusual position of the tumor in

relation to a loop of the small intestine. All were intra-ligamentous, and all were successfully enucleated by the method of the late Dr. Miner, of Buffalo.

CASE 1. Operation, December 17, 1889, at Mercy Hospital. This patient, a married woman, 33 years of age, without children, had noticed an abnormal enlargement of her abdomen for eight years. Of slow growth at first, this tumor had rapidly increased during the past year, and had been the cause of great pain. About one year before the operation she had begun to resort to the use of morphine to relieve her pain, and had gradually increased the amount to eight grains per day, always taken at a single dose. She had emaciated greatly, and had developed markedly the classical *facies ovariana*, now so rarely observed, thanks to early diagnosis and operation. The cyst at the time of operation was considerably larger than the pregnant uterus at term.

On the left side above Poupart's ligament could be felt a globular mass which proved to be the fundus uteri.

When the abdomen was opened the free surface of the cyst presented, and before evacuation by the trocar every thing appeared favorable.

When the contents had been partially evacuated, it was found that the cyst was implanted in the broad ligament, and its base extended over the entire width of the pelvis. After some omental adhesions had been tied off, a careful examination of the situation of the cyst was made. It had originated in the left ovary (as the position of the vessels subsequently showed) and had separated the folds of the left broad ligament, pushed its way behind the uterine, to which it was intimately attached, and imbedded itself deeply in the right broad ligament, where its greatest development had taken place. A beginning of the enucleation was made by separating the peritoneal and fibrous investment from the body of the cyst at the fundus of the uterus. The circumcision of these external layers was then continued at about the same level, and the enucleation proceeded with as rapidly as the density of the tissues would permit. A pedicle was finally made at the left cornu of the

*Read before the Alleghany County Medical Society, March 18, 1890.

uterus, which was tied, burned, and dropped. The tattered remains of the broad ligaments were brought together with a continuous silk suture, an aperture being left for the insertion of a glass drain into the cavity left by the growth. Several gallons of hot-distilled water were used to flush the peritoneum and the wound cavity. The margins of the sac were stitched into the lower angle of the external wound, and the incision closed.

The following day the patient developed an acute bronchitis, and her temperature on the second evening went to $103\frac{3}{4}^{\circ}$, with a pulse of 140. She was very ill for six days, and it was only by the persistent use of enemata of brandy and peptonized foods and large doses of carbonate of ammonia by the mouth that her strength was sustained. Her abdomen remained flat, and the incision healed in the usual aseptic manner, the drainage tube being withdrawn on the third day.

On account of the aggravation of her cough by recumbency, she was encouraged to leave the bed on the eighth day, and on the twelfth day was walking about the room. Her recovery thereafter was uninterrupted. She has since menstruated for the first time for ten months, and since the first week after operation has taken no morphine.

CASE 2. Operation, February 6, 1890, at Mercy Hospital. This patient was also a married woman, 36 years of age. Three years ago she noticed a lump in her left iliac region, which gradually increased in size till it was much larger than the pregnant womb at term, having doubled in size in six months. The growth was painless, and the patient at time of operation in robust health.

Abdominal incision revealed the tumor completely covered in front and below by adherent omentum and a strip of small intestine, which was attached to the tumor vertically from the umbilicus to the pubes, and which disappeared behind the pubic bone. By enlarging the incision above the navel, and to the pubes, room was made for manipulation. A large mass of omentum was lifted from the tumor and cut between ligatures. When this had been stripped from the tumor a more satisfactory examination could be made. On either side of the

vertical strip of small intestine extended a thin vascular membrane, which on the left lost itself in the peritoneal investment of the tumor, and on the right was everywhere closely adherent to it. There is no doubt that this was the attenuated remains of the mesentery. The cyst was tapped high up on the left side, and a thick, yellow, ovarian fluid evacuated. As the cyst collapsed its walls were found to pass to the lateral margins of the pelvic brim, and to be closely attached to the posterior surface of the uterus. Enucleation offered the only chance of extirpating the growth, and it was determined to make an effort to accomplish this. It was also a very serious question as to the best manner of dealing with the vertical strip of bowel which formed a sort of equator for the cyst. Its mesenteric attachment being obliterated, or rather spread out and amalgamated with the covering of the cyst, it was deemed advisable to begin the enucleation by a vertical incision through the serous coat of the cyst immediately to the left and parallel with the strip of bowel, for on this side the covering seemed thinner. By lifting together the strip of bowel and the covering of the tumor to the right of it in a continuous layer, it was hoped that this pseudo-mesentery would afford sufficient blood supply to preserve the vitality of the gut. The enucleation proved very tedious on account of the extent of the surface involved, and the tenuity of the covering which was to form a mesentery for the gut, and which it was therefore desired to preserve intact. This, however, proved impossible, and a large rent was made in the false mesentery.

When the enucleation was complete and the pedicle secured, an examination showed that the rent above mentioned had left about ten inches of intestine without mesenteric attachment. It then became a question whether a continuous suture of this rent or a resection of the bowel would be the better plan. The former was decided upon, and a continuous silk suture was applied to the whole length of the rent, in the hope that the middle of the strip of intestine would get sufficient blood supply from anastomoses through the covering of the gut itself, and by new vessels thrown

across the line of suture. Fortunately it so transpired.

The other ovary was then sought for and found to be the size of a large orange, and also intra-ligamentous. It was emptied, circumcised, and enucleated: it had no pedicle. Its contents were heavily charged with oil globules.

The operation had now occupied the major part of two hours, and it seemed hopeless to attempt any repair of the tattered remnants of the broad ligaments, even if the patient had been in condition to endure a continuance of the operation, which she was not, being in a condition of profound shock. A glass drain was therefore inserted, after profuse flushing of the cavity, and the wound closed and dressed with double cyanide gauze. For six or eight hours after being put to bed she lay almost pulseless, and required repeated hypodermic injections of whisky and enemata of hot salt water to revive her. After reaction was established her recovery was uninterrupted; her bowels were moved on the sixth day by repeated doses of Rochelle salts. A rise of temperature above the normal was noted on but one occasion, prior to the movement of her bowels on the sixth day, when the thermometer showed 100.5°. She walked out of her room on the twelfth day, and on the sixteenth left the hospital.

I have been unable to satisfy myself as to the manner in which this tumor and the small intestine assumed the relations which existed between them. Two explanations suggest themselves: the first that the subserous tumor pushed its way behind the prevertebral peritoneum and insinuated itself between the layers of the mesentery; the second, that the intra-ligamentous tumor, when small, contracted a broad adhesion to the bowel and mesentery, which later, as the tumor grew, became greatly attenuated, as it was widely stretched and firmly glued to the surface of the growth. A more deliberate and careful examination after the enucleation of the large cyst might have thrown light upon this question, but the condition of the patient rendered it hazardous.

An interesting point in this case is, that had this woman been tapped at the usual site the

trocar would certainly have perforated the bowel.

In closing this report I can not refrain from calling attention to the fact that these operations were both done in a general hospital, and expressing my conviction, as I did in this Society five years ago, that no reason in the world exists for fencing off the abdomen from the domain of the general surgeon; and further, that special abdominal hospitals exist for the convenience and profit of their owners, and are by no means necessary for the safety of the patients.

PITTSBURGH, PA.

REPORT OF FOUR CASES OF LAPAROTOMY.

BY X. O. WERDER, M. D.

I. Tait's operation. Patient thirty-eight years of age, has had five children, the youngest of which is nine years old. Since the birth of the last child she has never been well, suffering with constant pelvic symptoms and reflex neuroses, especially severe pains about the left side of the chest; had been treating her for more than two months with hypodermic injections of morphine, three fourths of a grain often being required to relieve her. Vaginal examination revealed an adherent retro-flexed uterus, with great tenderness of the uterine adnexa.

Laparotomy was performed December 7, 1889. The retroflexed uterus, which was held in its abnormal position by small fibrinous bands, was replaced, and the ovaries and tubes on both sides were removed. I had intended to perform a hysterorrhaphy at the same time, in order to prevent displacement of the uterus; but after removing the appendages close to the uterus, taking in the slack in the broad ligaments, I found the uterus in perfectly normal position, so that I did not think it necessary to do any thing further. The patient made an uninterrupted recovery, the temperature never going beyond 99.4°. The veins in the broad ligaments were varicosed, contained a number of phleboliths. The tubes were somewhat thickened; the fimbriae destroyed. The right tube was adherent to the ovary, but the

adhesions were separated during the operation; both tubes and parts of the broad ligaments were studded with small cysts. The ovaries were cyrrhotic, the left one very small and hard, the right one consisting chiefly of a number of cysts, very little of the ovarian stroma remaining intact. While the pelvic symptoms were completely relieved, the reflex neuroses were improved, but not cured, up to the present time.

II. Mrs. D., forty-two years old, no children; was suffering with a right ovarian cyst, which had been growing for about four years. Had also an adherent retroflexed uterus very much enlarged. For some years she had been subject to severe menorrhagia, which, during the last four months, had become so severe that she was obliged to remain in bed almost half her time. These hemorrhages had weakened her down very much; she was very anemic, and had the appearance of a woman of about sixty. Operation was performed January 9, 1890, Dr. J. J. Buchanan assisting. I found an intra-ligamentous ovarian cyst, the capsule completely enveloping the cyst except on its anterior aspect; the largest part of the tumor was very low down in the pelvis. The tumor was shelled out from its capsule, which, however, proved an exceedingly difficult task, as the walls of both cyst and capsule were very thin, causing them to tear through quite frequently; they were also very firmly adherent, rendering the operation very difficult and tedious. Some of the adhesions were very vascular; the hemorrhage during the operation was truly frightful; once or twice the blood welled up from the pelvis in such quantities that I feared I had torn the iliac veins. Most of the operation had to be done by the fingers, unaided by sight, as the tumor was so deep that nothing could be seen. During the dissection my fingers picked up the right ureter, which was firmly adherent to the tumor, but which I succeeded in separating without injury to the ureter. On two occasions the patient was pulseless during the operation, but was revived by hypodermics of whisky, of which several dozen were given. The operation, from the time she was placed on the table until she was removed to bed, lasted almost one
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hour and thirty minutes. After the tumor had been removed I washed her out freely with hot water, which returned perfectly clear; this was repeated after placing the stitches. A pretty large quantity of water was left in the abdominal cavity to counteract the great loss of blood; a drainage-tube was inserted. The patient's pulse had considerably improved upon the abdominal flushings, but shortly after it commenced to get weaker and weaker in spite of stimulation by mouth and hypodermically, and she died within ten hours after operation, from shock, never having rallied therefrom. About two hours after operation she had a violent fit of vomiting, which expelled a considerable quantity of bloody fluid from the drainage-tube, saturating even the outer dressings; but when the nozzle of a syringe was passed down into the abdominal cavity and operated, there was only a small quantity of dark blood withdrawn, showing that there had been no new bleeding, and that the fluid expelled from the tube was simply the water left in the abdominal cavity stained with blood.

III. Large dermoid cyst. Hysterectomy. Mrs. G., fifty-two years of age, is the mother of a large family. Two years ago menopause became established. About ten months ago she noticed the appearance of a tumor which increased very rapidly in size. For about four weeks before operation she was hardly able to leave the bed. She had several attacks of profuse uterine hemorrhage during that time, it being the first show for two years.

Laparotomy was performed January 22, 1890. Found a large dermoid cyst of the size of a uterus at six months pregnancy, with universal adhesions, especially to mesentery, omentum, intestines, sigmoid flexure, and pelvic walls. Upon emptying the cyst and separating the adhesions, the tumor was brought up into the abdominal wound, when it was found that a large portion of the base of it was a solid mass which was attached to the right side of the fundus uteri. This having been detached, it was found that the uterus itself was disintegrated to such an extent that in removing the diseased mass I removed a part of the uterine wall, leaving a large ulcerated cavity with ragged edges and filled with a soft, friable

ble, and cheesy mass which extended almost to the endometrium. There was no bleeding from this surface whatever. A hysterectomy, therefore, became necessary. An elastic ligature was passed around the cervix, the body removed, and the pedicle brought into the lower angle of the abdominal wound. There was still some free bleeding deep down in the pelvis apparently coming from some vessels in the sacro-uterine ligaments which had been torn in bringing up the uterus. It was exceedingly difficult to reach the source of the hemorrhage, but at last I succeeded to grasp the bleeding points with two large Spencer-Well's pressure forceps which I left attached, the handles being left outside of the abdomen. These were removed on the second and third day respectively.

The contents of the cyst were a thick creamy fluid looking exactly like pus, a large bunch of hair, and one little piece of bone attached to the internal cyst-wall. The abdomen was well flushed with hot water. No drainage-tube was inserted, as a glass drainage tube in such close proximity to the two large clamp-forceps in the abdominal cavity seemed rather risky. The abdominal wound was closed in the usual way.

This patient, from which every body present at the truly frightful operation, including herself, gave a fatal prognosis, rallied well from the shock and made a good recovery, her convalescence at no time being complicated by any untoward symptoms. The portion of the tumor attached to the uterus which had become softened and broken down, involving the uterine structure with its endometrium, the uterus itself being greatly enlarged, had all the appearances of malignant disease; but according to the microscopical examination of Dr. Matson, it fortunately proved to be a fibroma which, I suppose, had undergone a process of disintegration. This condition of the uterus sufficiently explains the hemorrhages which the patient had been subjected to during the last few weeks preceding the operation.

IV. Intra-ligamentous cyst. Ovariectomy and hysterectomy. Mrs. G., referred to me for operation by Dr. J. M. Stevenson, had a large ovarian tumor, which had been growing for

quite a time, but which had increased more rapidly during the last few months so that it had attained the size of a full-grown pregnancy. Though sixty-seven years of age and mother of a grown-up family, her physical condition was good, and she was regarded by her physician, Dr. Stevenson, and myself, a fair subject for operation.

The operation was performed January 25, 1890. No adhesions were encountered; the tumor was emptied and drawn out of the abdominal cavity, but when the pedicle was reached it was found extremely large and thick, and on closer examination a part of it proved to be the uterus. It was an intra-ligamentous cyst so closely attached with its lower portion to the uterus that it was thought preferable to remove the uterus with the cyst than to attempt any enucleation, as this certainly would have been exceedingly difficult, and could not have been accomplished without a great deal of hemorrhage, as the parts were exceeding vascular, and the veins very much dilated. It was, therefore, thought less risky, considering the age of the patient, to remove the uterus with the pedicle, than to expose her to the danger of an exhausting hemorrhage. This was done without any bleeding whatever, so that the usual toilet of the peritoneum, or flushing of the abdominal cavity, was omitted. The uterine stump was treated as in the first case, with an elastic ligature, and brought out to the lower angle of the wound, uniting peritoneum below ligature, so as to shut out the pedicle from the abdominal cavity. The patient made an elegant and uninterrupted recovery. There was one peculiarity about this uterus. The tumor being so large that it was completely drawn out of the pelvis, necessarily drew the firmly-attached uterus with it, which caused such a stretching of the organ that the lower portion of it felt like a long, hard cord included in the pedicle of the tumor. This had the effect also of stretching and elongating the vagina, the upper part of it being very much contracted and funnel-shaped, the uterus being entirely out of reach.

Neither of these two cases of hysterectomy, even the one who had the large clamp forceps in the abdominal cavity for three days, ever

required a single dose of opium or morphine to relieve pain; both seemed to be perfectly comfortable and contented.

PITTSBURGH, PA.

Societies.

ALLEGHANY COUNTY MEDICAL SOCIETY.

Special Meeting, March 18, 1890. W. E. Johnston, M. D., Vice President, in the Chair.

Dr. A. S. Daggette reported a case of a woman, seven months pregnant, who aborted four days after a fall. The child lived about forty minutes; the skin on its lower extremities and on the lower part of the abdomen had the appearance of being parboiled, and peeled off on handling, leaving large, livid, mottled spots. This macerated condition existed only in the localities named. The after-birth was normal. No history of syphilis.

Dr. Macfarlane thought the condition undoubtedly due to syphilis.

Dr. F. H. Edsall reported a case of

MALFORMATION OF THE EXTERNAL AUDITORY APPARATUS.

The patient, Ida G., aged eight, is of Jewish parentage, is delicate and rather anemic. The immediate cause of consultation was constant pain in the right ear. This pain was neuralgic in character, although there was shown, upon examination, to be a recent slight purulent otitis existing in this ear. The otalgia had been of much longer standing, showing that no connection existed between the two. This ear presented no appearances different from those customarily seen in cases of acute otitis media; it was normal in all its parts in as far as its development is concerned.

The left ear was a marked instance of arrest of development during fetal life. The entire auricle is small, probably not more than half the size of its fellow, and its several parts show a varying degree of imperfection in development. The helix, particularly near the upper margin of the auricle, is almost wanting, and the fossa of the helix is correspondingly imperfectly developed. The anti-helix is also scarcely to be traced, and the fossa of the anti-

helix is, consequently, lacking also, and there is no trace of anything resembling a tragus. The anti-tragus and lobule are more perfectly, or, rather, less imperfectly developed than the other parts, but these too fall short of full development. The concha is very small and shallow. An external auditory meatus is lacking, and the only indication of the site of such an opening is a shallow depression, probably about one millimeter in depth, in the skin over what would otherwise be the outer opening of the external auditory canal. Upon making firm pressure over the center of this depression it is possible to deepen it somewhat, indicating thus that there exists beneath at least a cartilaginous canal. Hearing on this side of the head, as was to be expected, is entirely absent. Neither the ticking of the watch nor of Politzer's "Hocrmesser" can be heard even on close contact, according to patient's statement. Absolute reliance could not be placed on patient's statements in regard to this, as she is timid and is, moreover, somewhat dull of comprehension. But as it usually is in such cases that the middle ear and Eustachian tube share in the defect in development, it is more than probable that her statements were correct. The hard palate is, not infrequently, affected by the same arrest of development which overtakes the auditory apparatus, but in this instance nothing of the kind was observed.

As to what is best to do in a case like this, I think there is but one thing to be said; let it alone. Surgical interference would be meddlesome, for, aside from the difficulty which would be experienced in preventing an artificial opening from closing up again, there would be little probability of such artificial canal proving of any benefit. The reason for this can be readily understood when we consider that, according to Virchow, these cases are due to a disturbance in the process of closure of the pharyngeal cleft early in fetal life. Therefore, inasmuch as the external ear, the tympanic cavity, and the Eustachian tube are all developed either from the first pharyngeal fissure or the first and second pharyngeal arch, it usually follows that marked imperfections in the development of the external au-

ditory apparatus are accompanied by corresponding defects in the other portions of the auditory apparatus developed from the fetal structures named. In consequence of this, even if an open pathway for sound waves were successfully maintained, the results, in cases like the one I have named, would probably be *nil*, due to defects in the tympanum.

Moreover, in a patient as old as this one, I am inclined to believe that even were the tympanum fully developed, hearing would at best be very imperfect, because of the long-continued disuse of the organ, just as we find a squinting eye becoming amblyopic in the course of time from lack of use, although I have no data bearing on the subject of the effect of disuse on the auditory nerve.

Cases like the one I have related, while not extremely rare, are sufficiently so to make them of interest as curiosities, although they are of little practical value.

Dr. Lippincott: Four patients presented themselves at my office within three weeks with foreign bodies which had entered the eye, and in the first three cases I made an effort at extraction with the magnet. In two I succeeded in withdrawing the steel from the neighborhood of the retina and the optic nerve with the magnet, and there was a recovery of a moderate degree of vision. In the third case, suppuration took place subsequent to the removal of the steel; the steel was removed at the operation and everything appeared to go well for about six days, and then irritation appeared and suppuration subsequently occurred. In the fourth case the patient was so positive that nothing had entered his eye that, although all the signs pointed in that direction, I did not feel like taking the responsibility of urging an operation, because if steel was not in his eye any operation would have interfered with its recovery. The man went to the point of refusing an operation. He went home and returned in two weeks with severe inflammation of the eyeball. I enucleated the eye and found a large piece of steel.

The cases are not specially instructive except in so far as to suggest that if the foreign body happens to be of steel or iron, or something that will respond to the magnet, an effort

should perhaps generally be made to withdraw it. There are cases, of course, in which that would scarcely be allowed, as from the nature of the injury an inflammation of the eye might be excited which would involve the other eye. But if the wound happens to be not in a very vital point, an effort should be made to withdraw the foreign body, and in that my experience lately would seem to show a certain degree of success can be anticipated. The last case was instructive as showing how little dependence is to be placed upon the opinion of a patient. The patient generally thinks that nothing went into the eye; in nine cases out of ten I do not believe the patient thinks a foreign body has entered the eye. The man in my case was certain it had not entered his.

Dr. Allyn: I have had a case quite similar about two months ago, which has bothered me a good deal owing to the lack of activity in the inflammation. The man was struck by a fragment of steel, which punctured the cornea, and cut a hole directly back through the iris. He reached my office within two hours after the injury, when he was absolutely blind to all light; could not see a finger or anything. He maintained, as the doctor has said they all do, there was nothing in the eye; he had simply been struck in the eye, and a physician had removed the foreign substance. I told him it was my opinion the steel was in the eye, and asked him to inquire of the physician if it was really a metallic substance he had picked out, and on his return he told me that it was nothing but a piece of dirt. I told him to come back in a day or two, giving a chance for inflammation. The next day he returned feeling perfectly comfortable, and has never had to this time a particle of pain. There was a small particle up in the anterior chamber which resembled metal covered with pus, and for two or three days I was uncertain whether or not it might be metal. Finally under the treatment the particle completely cleared, leaving adhesion of the inner border of the iris to the anterior surface of the lens. He continued to get better, and maintained there was nothing in the eye. I strongly maintained there was something in it, but the patient wishing no operation, I left the case from time to time, the

eye improving; but at the last examination I found a band reaching through the lens and striking backward into the center of the eye. At the end of that band I am sure there is a piece of metal.

Dr. W. C. Shaw: I was called recently to examine a man for life insurance, a very healthy man who said he had not had occasion for a family physician for himself, never having been sick. When he was about to go, I asked for a specimen of his urine. In the bottle the fluid looked as clear as crystal. I put the specimen in my pocket and came to the office and examined it and found it to have a specific gravity of 1012, and to be full of sugar. This is the only specimen of so low gravity and containing sugar I have ever had.

Dr. Lippincott: That is very low specific gravity. I saw a case of saccharine diabetes in Philadelphia before I came to Pittsburgh, and the man had lived twenty-five years with that sort of urine. Dr. Austin Flint, Sr., had told the man twenty-five years before I saw him that he would be dead within a year, but the man told me he was enjoying fairly good health at that time.

Dr. Lange: Dr. Shaw's case is peculiar, inasmuch as urine with a specific gravity of 1012 full of sugar is a rare specimen. In the text-books and pocket manuals for the examination of urine you will frequently find it stated that no urine of a specific gravity of less than 1012 can contain sugar. Dr. Shaw's case—the urine presenting a specific gravity of 1012 and full of sugar—is an exemplification that this statement is erroneous. I, myself, have more than once obtained specimens of less than 1020 specific gravity, which, though not "full," contained some sugar.

Dr. McCann: The following case recently came under my observation—a German suffering from cancer which involved the rectum about three inches above the verge of the anus, in which the whole anterior wall was involved and fully three fourths of the rectum, the disease extending fully two inches up the rectum. The patient suffering from the distress which attends this condition came under my care. The question as to excision of the rectum or colotomy came up. I determined to resort to

another operation, one which does not involve the technique of a formidable excision, but which is equally effective. The patient being etherized and placed in a proper position, I introduced my finger into the rectum as far as I could, and then with a Volkmann's spoon scraped out the growth slowly piece by piece, avoiding the wall of the bladder in front, the base of the bladder, and guarding against entering the peritoneum. Thus by a careful and slow, not an elegant operation by any means, but a careful scooping out just as is the habit in scooping out cancerous growths from the cervix uteri, I was able to remove the entire growth. In doing this, I did not destroy the external sphincter; I did not damage the wall of the bladder. I avoided opening the peritoneal cavity, but I certainly cleaned away every portion of diseased tissue down to the peritoneum. The operation required a considerable length of time. Fortunately the sphincter was so easily dilated that I had abundance of room, and after having removed a portion of the mass was enabled, by the use of the Sims' speculum, to hold back the posterior wall of the rectum, the portion least diseased, so that I had a very fair view, and drawing down the rectum I was able to get beyond the diseased area and into that portion of the rectum where I found the mucous membrane was normal. After having done this, the surface was carefully washed with an antiseptic solution and the bowel plugged with iodoform gauze. The bowels moved on the third day. The rectum was again washed out, plugged for a time with iodoform gauze, and afterward allowed to remain without any treatment whatever. The result was that the distressing pain from which the patient suffered was relieved at once. Since that operation six months have elapsed. During all of this time, until quite recently, the patient has been free from pain. Recently, however, a new growth or rather a reoccurrence of the growth has appeared upon the anterior wall of the rectum. The patient has promised to come back for a repetition of the treatment. As a result of this operation, there was no incontinence of feces. The external sphincter was left undisturbed. The internal sphincter was involved in the growth

and removed; he had, however, control of the bowels. The operation did not result in contraction or stricture of the rectum. Recently I assisted a friend in the removal of a cancerous growth from the rectum, in which a more formidable operation was undertaken. The perineum was split from the point of the coccyx clear into the rectum, and then an effort was made to cut out the diseased tissue. A portion of the diseased tissue was removed, but the growth was so extensive that its complete removal with the knife had to be abandoned. It occurred to me at the time of that operation, and in thinking over the matter since, that the safer operation is to simply scoop out all of the tissue possible, to clean away the diseased tissue, and to make your patient as comfortable as possible, because you can not hope to remove a malady which is going to destroy him sooner or later.

Reviews and Bibliography.

Lectures on Bright's Disease. By ROBT. SAUND-
BY, M. D., Edinburgh. With fifty illustrations.
290 pp. New York: E. B. Treat. 1889.

In keeping with the awakened attention of the laity, is the increased interest of the medical profession on the subject of Bright's Disease of the Kidneys. Of many of the works that come from the press the review might be completed in a single word, "Another." Many of them have neither any thing new nor any improved presentation of what is old. How well, indeed, the mine has been already worked is shown by the fact that little that is strikingly valuable and original has come from the hand of so close, able, and experienced an observer as the author of this volume.

We doubt, however, if the subject is anywhere more clearly presented, and a more intelligent selection made of valuable facts and principles. One of the most interesting chapters relates to the old but always interesting question of the cause of the tense pulse and hypertrophy of the heart in Bright's disease. Of particular interest is a contribution to this discussion by Dr. Hamilton. Dr. H contends that the cause of the blood cells running in the

axial stream of the smaller vessels is purely physical, and results from the fact that the cells and the blood plasma are of the same specific gravity, the same phenomena being observed when solid particles in suspension in a fluid of their own specific gravity flow through a tube of glass or other substance. When, however, the particles are heavier or lighter than the fluid they will strike against the walls and cause friction; this friction in the blood circulation gives rise to resistance, the resistance to over-action of the heart, and over action to hypertrophy.

This explanation, however, fails to inform us why the heart, underfed as it is, does not decline to do the extra work, and work, too, that eventually brings harm to itself. We find nothing in the whole able and interesting discussion to militate against the view that the agent is reflex nerve influence. The tissues fail to get their wonted supply of normal, healthy blood, and demand more than usual in quantity to make up for loss in quality, just as one must breathe more rapidly when supplied with air vitiated with carbonic acid or other hurtful gases. As the air-passages often attempt to contract to keep out this vitiated, irritating air, so the arterioles and larger capillaries contract to keep from the tissues the vitiated blood. But the tissues, through the nervous system, demand their supply, and the heart is compelled to try to furnish it even at the expense of its own integrity. Other conditions, it is true, may contribute to the difficulty of circulation, but the overwork is due to a deeper influence than the mere fact of obstructed circulation.

To the classic treatment very little is added, only the stamp of worthlessness is put by the author on several medicaments that have been from time to time vaunted as remedies. D.T.S.

Through the Ivory Gate. Studies in Psychology and History. By WILLIAM W. IRELAND, M. D., Edinburgh, 311 pp.

This work forms the sequel to a work recently given out by the same author, entitled "Blot on the Brain," in which the author endeavored to show how the career of Mohammed, Joan

of Arc, and others was determined by a mild form of delusional insanity.

In this volume Swedenborg, Guiteau, King Ludwig, of Bavaria, and others are historically considered with reference to certain evidences of alienation that controlled their conduct. There can be little doubt that a large proportion of the so-called religious reformers of all ages have been men in some respects off their balance. And to the names considered might very justly have been added that of Hahnemann, the originator of homeopathy. The book is written in charming style, and is besides marked by great acumen and judicial fairness. The author thinks there is no doubt of the fact that Guiteau suffered from a degree of insanity. He believes, however, that the law and medicine can never draw the same line in matters of this kind, and that, while in a medical sense Guiteau must be considered in a certain degree of unsound mind, he believes that certainty of punishment and infamy would have deterred him from his crime just as his punishment and universal condemnation will deter others like him. In this few thoughtful men will differ with him.

The unique title of the work the author derives from a hoary tradition of the ancients, that there are two gates to the brain, one of horn and the other of ivory. Into the gate of horn ideas enter that accord with nature around us, while through the ivory gate enter dreams, delusions, and all idle and baseless fancies.

D. T. S.

Diagnosis and Treatment of Extra-Uterine Pregnancy. By JOHN STRAHAN, M.D., M. Ch., M. A. O. (Royal University of Ireland). Jenks' Prize Essay of the College of Physicians of Philadelphia. 134 pp. Price, \$1.50. Philadelphia: P. Blakiston, Son & Co. 1889.

The task of the reviewer in considering this volume is an easy one. Dr. Wm. F. Jenks, a brilliant obstetrical writer, of Philadelphia, was cut short in a most promising career by an early death. His wife executed a deed of trust to the College of Physicians of Philadelphia, the proceeds of the trust to be expended in prizes for contributions to obstetrical knowledge. The first prize under the provisions of

the trust (\$250) was offered for the best essay on "The Diagnosis and Treatment of Extra-Uterine Pregnancy." To the author of this volume the prize was awarded, the Committee of Award being Drs. Ellwood Wilson, Theophilus Parvin, and James V. Ingham. In concluding the award, the committee say: "We desire to compliment the author upon the remarkable excellence of this essay, which will long be memorable in the records of the college for having received the first award under the above-mentioned deed of trust, and we also wish to express our thanks to the giver of the fund which has been instrumental in producing this very valuable contribution to the literature of the profession."

D. T. S.

A Manual of Organic Materia Medica. Being a Guide to Materia Medica of the Vegetable and Animal Kingdom, for the use of Students, Pharmacists, and Physicians. By JOHN M. MAISCH, Ph. M., Phar. D. Fourth edition. 539 pp. Price, \$3.00. Philadelphia: Lea Brothers & Co. 1890.

Every ambitious physician has doubtless felt the need and the desire of understanding the descriptive parts of the United States Dispensatory relating to such medicines as he found useful in his practice, and few have not felt the discouragement of looking through so large a volume. Just this arduous task has in this volume before been performed by the author. The closer and fuller acquaintance with the medicines he uses that may be here obtained can not fail to add zest to the practice of medicine, since the physician more and more comes to regard them as friends and allies, almost intelligently aiding him in his contests with disease.

D. T. S.

Manual of Skin Diseases. With Special Reference to Diagnosis and Treatment. By W. A. HARDAWAY, M. D. 434 pp. St. Louis: Theo. F. Lange. 1890.

This manual is an elaboration of the lectures delivered by the author to his classes in dermatology in the Missouri Medical College. Dr. Hardaway has made some valuable contributions to the treatment of skin diseases, especially in the employment of electrolysis, and in

connection with these contributions his name has been widely known at home and abroad. Even if the author had not done so much to enrich the science of dermatology, this manual could not fail to make his reputation. One has the satisfaction, in examining his methods of treatment, of knowing that what is recommended has been proved by experience, and not merely culled from other books and journals.

D. T. S.

A Hand-book of Obstetrical Nursing. By ANNA M. FULLERTON, M. D., Demonstrator of Obstetrics in the Woman's Medical College of Pennsylvania. 214 pp. Price, \$1.25. Philadelphia: P. Blakiston, Son & Co. 1890.

A striking point in regard to this volume is, that as far as we know it is the first contribution of the kind from a woman physician. This we might have inferred without the name appearing, from the hyperbole of the statement that certain results had proved the value of cleanliness, antiseptis, and *eternal* vigilance on the part of the nurse.

A woman's hand appears also in many and pertinent allusions to dress, the author advocating reformed methods of dress which so obviously commend themselves that they ought not to need advocates. Altogether the little work compares well with any other candidate in the same field, for public favor.

D. T. S.

Book on the Physician Himself, and the Things that Concern His Reputation and Success. By D. W. CATHELL, M. D. Ninth edition, revised and enlarged. 298 pp. Price, \$2.00. Philadelphia and London: F. A. Davis, publisher. 1889.

The work has been already so widely discussed, and is so well known that no extensive review is required. There are few readers who will not find much in it that is superfluous, and likely also somewhat to condemn. When we consider, however, that it is intended to go into the hands of readers infinitely varied in attainments and needs, we might not well say that the task could be easily better performed. Certain it seems to us no physician in the formative stage of his career could rise from its reading and deny that in reading it his time had been profitably spent.

D. T. S.

A Treatise on Fractures. By Prof. ARMAND DESPRES. Translated by E. P. HURD, M. D. 112 pp. Detroit, Mich: George S. Davis. 1890.

This is not intended to be a complete treatise on fractures, but to embody the author's ripe experience in the treatment of the more common fractures, and to be a guide to the ordinary practitioner. It is by no means designed to supplant such classic works as Hamilton's. It is one of the numbers of the Leisure Library series, and is a charming little work; just the work for a physician to have along with him that he may get perfectly well acquainted with all the ordinary fractures, while waiting on a tedious case of obstetrics or tardy consultation.

D. T. S.

Monthly Nursing. By A. WORCESTER, A. M., M. D. Second edition. 250 pp. New York: D. Appleton & Co. 1890.

This little book appears to have been written mainly for nurses of lying-in women, and just why it should have been entitled "Monthly Nursing" we fail to see. The part of it that relates to "labor" is not full enough to limit the attainments of those who would direct and control during parturition, and yet, perhaps, full enough to lead those who have read this alone to venture to manage cases of "labor." The parts that relate strictly to nursing are admirable, and all is well written.

D. T. S.

Correspondence.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

A short time ago M. Roux, Chief of the Office of the Prefecture of Police of Paris, was assassinated by a subordinate of his for some imaginary grievance. Immediately after the crime the man gave himself up, and he is in custody under observation, as he is supposed to be insane, or rather that he must have been so when he committed the deed, as it was well known that the assassin and the victim were on very good terms. This case has been cited by Alienists as an example of what is termed "delirium of persecutions," a form

of insanity which is extremely common, and it is this form that causes the greatest number of assaults. Dr. Monin writes that the statistics of Dr. Legrand du Saulle indicate that the "persecuted" represent about one fifth of the total number of lunatics of the Depot of the Prefecture of Police, of which he was for many years physician. The author states that the delirium of persecutions is not only dangerous, but its prognosis is most unfavorable, for, if certain ameliorations or remissions are observed in this mental condition, true cures have never been noticed. The persecuted presents himself, habitually, with the appearance of perfect physical health, rarely interrupted by the nervous symptoms observed in other varieties of insanity. His intellectual state, on the contrary, frequently presents nothing abnormal. In these conditions it would be difficult to suspect insanity in the subject. Moreover, the persecuted person often knows how to dissimulate with remarkable prudence the delirious ideas which besiege him night and day, and the melancholy anguish with which his diseased brain is impregnated. He is ordinarily sufficiently intelligent to mistrust those who question him, and to repel the responses which he tacitly makes to himself. Like the calumny of the Rossinian Basilio, the idea of persecution at first presents itself under the form of an insignificant "*Ventilcello*." Gradually this chimera assumes a form, it grows every day, becomes intensified, systematized or, as Falret expresses it, "crystallized," by one of those slow but certain processes to which mental alienation is accustomed. To the delirious conceptions are soon added sensorial hallucinations, which whisper to the ears of the unfortunate lunatic the name of his pretended persecutor, and he soon localizes on one head all the grievances, whether real or imaginary, of his life. The most insignificant events, the perversions, the most personal, of his sensibility are attributed to enemies who bear him animosity. The delirium is sometimes mixed up with ambitious or arrogant ideas, a sort of hypertrophy of self (*hypertrophie du moi*), as expressed by Professor Ball. It is then, also, that the persecuted subject experiences the invincible necessity of giv-

ing vent to his grievances in voluminous and incoherent communications addressed to the police, to the magistrates, and to personages of position. All persecuted individuals are candidates to homicide or to suicide, according as his delirium is active or passive. The active persecuted subject is the most common. One particularity may be noticed in this connection, viz., double insanity (*folie à deux*) or communicated insanity in the delirium of persecutions. The delirium of persecutions often breaks out at a mature age, at the height of the season of vital struggle, in subjects who have hereditarily lost their equilibrium by the abuse of the cerebrum and of the cerebellum. It is, however, also observed in the aged, and it should be described as one of the forms of what is perhaps too vaguely termed, "senile demency." Aged persons are, at first, naturally egotistical, gloomy, and distrustful. They willingly exaggerate their state of inferiority, and repeat over and over incessantly that they are a burden to those about them. Add to this mental state, divers senile alterations of the the senses, and particularly that of hearing, of the taste, and of smell, alterations capable of some day assuming hallucinatory forms. They soon believe that somebody wishes to poison them, or conspire against their lives. However, these ideas of persecution are habitually more fugitive, more mobile, more platonic, and therefore less followed by insane acts than in the young persecuted subject. This is easily explainable, if one considers the feeble condition of the memory and the gradual physical and moral debility which characterize old age. The greater number of the benefactors of humanity or philanthropists who bequeath their fortune to the public assistance, and found in the academies prizes for those who would cure cholera, are old persecuted lunatics, happy to disinherit their relations with whom they were on bad terms. Dr. Legrand du Saulle remarks, that far from pretending that these posthumous liberalities are always the unconscious expression of intellectual troubles, he would say that very frequently in these cases the mental state of the testator, an old egoist, avaricious and persecuted, was found considerably damaged, and

the will in consequence rendered of no value. Dr. Monin concludes his interesting article by directing attention to senile mental troubles in general. He recalled the fact that the brain, the organ by which so many aged persons succumb is, as has been often remarked, under the close dependence of the digestive tube. Consequently, the resources of hygiene and of curative medicine should be applied to the gastro-intestinal sufferings of the aged. For it is beyond doubt that melancholic ideas and insanity start, as frequently perhaps as apoplexy (in aged persons) from this gastric vital center, so justly surnamed by Bichat the "abdominal brain."

In connection with the subject of insanity I may here reproduce a note from the *Journal de la Sante*, by which we are informed that Dr. Giacchi, of Turin, in writing on the manner in which lunatics die, observes that often lunatics present in the later periods of their unhappy existence a surprising metamorphosis. A notable number of acute or chronic lunatics, and even demented subjects, who for some years have been incapable of reasoning correctly, miraculously recover on their death beds full consciousness of themselves. They die conscious, and often placidly and serenely, as much and even more so than persons of sound mind who succumb to the same malady. Often, in the few days which precede death, one finds in the one as well as in the other (sane and insane persons) a complete interversion, particularly when life is extinguished by the aggravation of chronic maladies of the abdomen or of the chest. Thus, while the phthisical subject or patient affected with chronic diarrhea at its last stage is often in a state of mental aberration, or at least of weakness of the intelligence; on the contrary the lunatic, under the influence of the last stages of physical disease, sees the darkness of his intelligence dissipated; similar to the flame which is about being extinguished, the mind resumes its lucidity, a striking contrast with the darkness or agitation of insanity.

PARIS, April, 1890.

A LATENTIOUS DEPOSIT—Knocked down by a brickbat.—[ORIGINAL.]

Abstracts and Selections.

SOME MOOT POINTS IN OBSTETRICS—(D. T. Smith, M. D., Louisville, Ky.) For more than twenty centuries large numbers of the foremost minds in the ranks of medicine in each succeeding age have directed their ingenuity and learning to the explanation of the phenomena of labor. To assert, then, that a very large proportion of the explanations hitherto offered of the movements involved in the mechanism of labor are wholly erroneous, would appear to deserve the charge of presumption and arrogance.

However positive I may feel, therefore, in my convictions, I will begin by deferentially asserting that facts, principles, and analogies can be adduced strongly leading to the conclusion that much of the accepted teaching relating to the factors and mechanism of labor is erroneous.

These errors refer—

1. To the uses of the amnion.
2. To the cause of head presentation.
3. To the cause of rotation.
4. To the mechanism of extension.

1. *The Uses of the Amnion.* The uses commonly ascribed to the amnion in our physiologies are such as might be inferred from observations of its office in the higher animals, and especially the human race. The amniotic fluid is said to preserve the fetus, and also the fetal membranes, from mechanical injuries; to permit the limbs to move freely and protect them from growing together; and also to aid in dilating the os uteri during labor. This no one can gainsay, as far as the higher animals are concerned; but if we inquire the office of the amnion in the reptile, the batrachian, or the bird, will this answer suffice or apply? Certainly not. So far as we know, the different parts of the body of the eel, which has no amnion, do not grow together with any more frequency than those of the snake or the crocodile, which have an amnion. Nor is it likely even, with the bird, that the fluid of the amnion one time in a million protects the young from injury. Nor could it aid, in any of these animals, in opening the mouth of the uterus. What, then, can be its office in the lowest animals in which it occurs, and the office common to them and the higher animals? But one appears. It is that of a waste-bag for the injurious excretions from the body of the fetus.

In the very lowest vertebrates the umbilical vesicle, or yolk-sac, was sufficient to preserve, in a proper condition, the nutrient material of the ovum. But a little higher up the yolk-sac

had to be supplemented by a receptacle for material likely to contaminate this store of food; and this receptacle nature converted, among the higher animals, into a protection for the embryo and an aid in parturition. From this view of the case, one might conclude that the amnion, as a waste-bag, is of more importance to animals low down in the scale than to the higher animals, in whom the waste is carried off in part by the placenta.

2. *Cause of Head Presentation.* It is unnecessary to repeat the various theories that have been put forth from time to time as to the cause of head presentation; it is enough to say that no one of them is accorded general acceptance among obstetricians. I will simply state my own view and the manner in which it seems borne out by facts and analogies.

Whoever has practiced diving in deep water has discovered that if he holds his arms in such a way as not to hinder his progress—folded at his back or breast, for instance, or pressed to his side—and then kicks out with his feet, he will go directly and head foremost to the bottom. Now, the position of the child in the uterus and the course of its development are such that it makes essentially similar movements. The flaccid state of the walls of the uterus allows them to yield when pressed against by the lower limbs, and in this way the fetus gains the advantage that would accrue to it from swimming in a larger mass of water than that actually contained in the uterus.

If now we add to the influence of these movements that of the increasing conicity of the lower segment of the uterus that develops during the latter months of pregnancy, we can easily account for the greater preponderance of head presentations. In every position the mother takes, except that of lying on the side, the outlet of the uterus is lower than the fundus, and in all except the latter the movements the child spontaneously makes will tend to place it head downward.

As the lower segment becomes more and more conical, the head is the more likely to remain in it when once placed there, since the arms of the fetus are passive, and the activity of the legs continues, and even increases, as gestation advances.

On the other hand, should the breech get into the lower segment, the extension of the legs will broaden the corresponding extremity of the fetal ovoid giving it a tendency to escape and make place for the head.

In the early months head presentations will more often fail, for the reason that the fetus will move more sluggishly and more rarely place its head downward, and for the further reason that, the uterus being spherical, the

fetus will fall over more readily, even after it has gained the inverted position.

The large size of the head of the hydrocephalous infant will prevent engagement in the conical segment, and, furthermore, the movements of such infants will be less energetic and less persistent.

Dead fetuses will be likely to remain in the position in which death found them, and so present at birth. In a very few instances decomposition might generate gases in the lungs alone, and thus determine breech presentation by causing the head to rise. An extensive generation of gases, on the other hand, would probably leave the head least affected, and this would naturally settle to the lowest point.

It is greatly in favor of this theory that it supplies a reason for the equally predominating frequency of head presentations in quadruped mammalia, which no other theory has ever done. A calf, a pig, or a colt, or the young of any other quadruped mammal, if thrown into water the moment after birth, in such a way as to be plunged beneath the surface, will, by the exercise of natural walking movements, swim to the surface. Now, the outlet of the uterus of the quadruped mammal is higher than the fundus in nearly every position the animal ordinarily assumes. By the exercise, therefore, of its natural walking movements, the young of the quadruped mammal carries itself head foremost upward to the outlet, resulting in presentation, with great uniformity, by the head.

3. *Internal Rotation.* It could not be wide of the mark to say that the most important thing for the obstetrician, in the exercise of his office, to understand is the state and course of internal rotation. Rather let it be said that he who does not understand rotation in its practical bearings is not an obstetrician. This can not be said, however, of rotation in its theoretical aspects, for here there is any thing but a consensus of opinion.

It is needless to enter into details of the various theories, and of the arguments adduced to sustain them on the one hand or to refute them on the other. They are found in all the text-books of obstetrics, and every student is familiar with them. I will add but one objection, and that to a theory proposed, I believe, by Berry Hart. This theory is that the part of the presenting extremity of the fetal ovoid that first reaches the floor of the pelvis is directed forward. I think this theory erroneous in principle and refractory to experimental proof. To illustrate what might be supposed to take place under the circumstances named, let a boot-tree be taken and suspended on a rod passed through a hole bored through

the longitudinal axis of the leg in such a way that it can revolve without hindrance. Now let the boot-tree be moved forward by a force applied to this rod, and at the same time let the toe be permitted to press on the floor. Will the toe turn forward in such a case, or will it not? Most assuredly it will have a tendency to turn to the rear. And just as little, in my opinion, will the part of the fetal ovoid that first touches the floor of the pelvis turn forward merely by reason of being the first part that does so touch.

The principle I would propose as explaining rotation is the almost axiomatic one that a force moves along the line of least resistance; or, rather, that a force will be deflected from points of greater resistance.

My assumption is that the anterior surface of the passage is the line of greater resistance, and that the roughest and most resisting surface of the presenting part of the fetal ovoid will be forced from the anterior to the less resisting posterior surface of the passage.

To make clearer the physical principles involved in rotation, let us take a tube of wax constructed of parts of two other tubes, one larger than the other. Into this tube let a cylinder be inserted with a bullet attached to one side of the advancing end, in such a way as to compel the cutting of a groove in the wax as the cylinder advances, and let the beginning of the groove be at a point in the part of the tube formed by the segment of the larger circle. It is clear that the wall of the groove thus made which is on the side next to the larger extremity will be higher and stronger than that on the side toward the smaller extremity, just as a furrow made by a plow driven along a hillside will be deeper on the upper than on the lower side. The bullet will, therefore, necessarily move toward the segment of the tube corresponding to the smaller circle, carrying the cylinder with it, until a point has been reached by the bullet where the two walls of the groove it makes in the wax shall be equal in depth, when rotation will cease.

Let us now apply this test to the several presentations and positions. In vertex presentations with the occiput anterior, and in rotation of the shoulders and hips, the movement is explained equally well by ascribing it to the influence of the smooth ischial planes. And although it is obvious that the two opposite surfaces of the ovoid in the two last-named instances are not different in smoothness, nevertheless here, as in occipito-anterior positions, the movement is in the direction of least resistance.

But in occipito-posterior positions, in face

presentations, and in rotation of the head in breech presentations, we have a clear field for the application of the principle. Let us take up, first, rotation in occipito-posterior positions. Here we have, on one side of the presenting extremity of the fetal ovoid, the roughness of the angles of the forehead, the nose, chin, and malar bones; and, besides, the face, being free of hair, may be stripped of the vernix and thus become more resisting. On the opposite side is the smooth occiput, regular in outline and usually covered with hair, enabling it to retain the unctuous vernix, making it altogether favorable for gliding. The face is the rougher surface, and the occiput the smoother and less resisting.

According to the principle of physics assumed at the outset, the surface first described, the face of the fetus, will be driven with the greater force from the point of greater resistance, and will turn to and follow the line of least resistance. The part with the smoother surface, the occiput, on the other hand, while it will seek also the line of least resistance, will be compelled by the more resisting anterior part to turn to and pass out by the line of greater resistance.

Now, which of the surfaces of the passages affords these lines of greatest and least resistance respectively? If we examine the pelvis, we find that the passage presents a short curve under the pubes and a long curve along the sacrum. Moreover, while the hollow of the sacrum is approached by a guide of bony substance, the pubes is approached over a muscular floor which may be pushed forward by the head of the child, leaving in the abrupt edge of the pubes a strong obstacle to progress. On transverse section, also, the anterior walls of the canal form part of a larger circle than the posterior walls.

If these assumptions were known to be true, it could be predicted with the greatest confidence that the face would turn backward and the occiput forward, even if no observations had ever been made. Nor is it difficult to explain how, in certain cases, failure may occur in rotation.

Thus, if the head should reach the floor in a state of extension, the obstacles to rotation might be greater than to birth in that position; for then a wedge would have to be rotated instead of the truncated cone which is offered in case of complete flexion. Or the rigidity of the soft parts, or the large size of the head relative to that of the passages, might be so great as to make the obstacles to advance less than those to rotation, when the child would be born in the occipito posterior position.

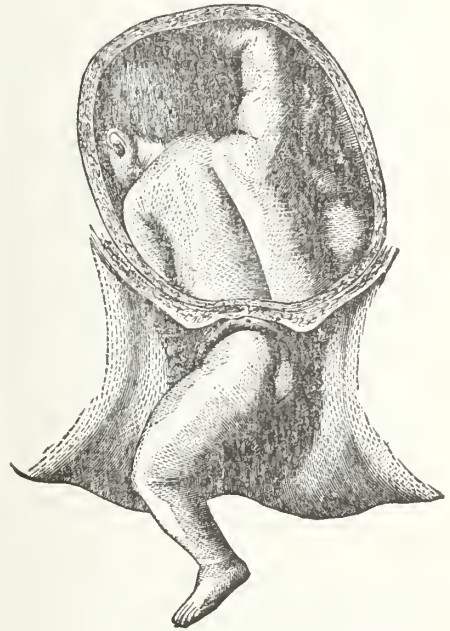
Let us next take rotation of the head in case

of footling presentations. Here exactly the same forces operate, only they operate in some respects with greater intensity, since the friction produced by the face passing chin foremost will be somewhat greater than that produced as it passes forehead foremost. On the other hand, the passages, having been already dilated by the body of the fetus, may offer slightly less resistance to the advance of the head. But, taken altogether, the forces operating will turn the face to the sacrum with somewhat greater certainty than in vertex presentations.

If, however, extension of the head should take place during descent, throwing the face upward and the occiput backward, the chin being nearly in a line with the sternum, the point of greatest friction will be shifted to the spinal surface of the fetus, and rotation will take place so as to turn the chin to the pubes.

4. *Face Presentations.* In face presentations, the occiput being borne well back on the spinal column, the posterior surface of the presenting extremity of the fetal ovoid will be the most resisting. The consequence is that rotation of the forehead takes place posteriorly, and the chin is turned to the pubes. If, however, ex-

the corresponding side invariably rotates to the front; or, rather, the opposite side turns to the sacrum. Here the most abrupt and resisting part is the hip of the leg remaining in the uterus, and this turns posteriorly to the sacrum.



LEG BROUGHT DOWN IN TRUNK PRESENTATION.



FACE PRESENTATION.

tension is incomplete, so as to equalize the resistance of the two sides, the chin may rotate posteriorly.

5 *Footling Presentations.* In footling presentations, where one foot is brought down,

In conclusion, let us concede that not one of these deductions is true, that they are all a mere bundle of fancies; they still offer a most valuable basis for remembering and predicting the rotation proper in each particular case. The principle may be formulated as follows: *Whichever part of the presenting extremity of the fetal ovoid offers the most resistin; surface will turn by the shortest route to the hollow of the sacrum.* This would have to be slightly modified to apply to the aftercoming head, since this would not be the presenting extremity.

In those cases of trunk presentation, also, in which it is possible for labor to proceed, the head invariably turns forward and rests above the pubes, the anterior shoulder becoming at the same time fixed under the symphysis. Such cases present a verbal exception to the aphorism just laid down, in that the rotation of the roughest part takes place forward and not backward. However, it is easily enough explained on the same principle of unequal friction, if we reflect that here rotation takes place above the pubes, and that the part of the canal along the lax abdominal wall, and not that along the sacrum, affords the line of least resistance. The head, therefore,

which is here the most resisting part of the advancing fetus, turns to the wall of the abdomen above the pubes. Contrary to the teachings, it is the head then that, by its rotations, brings the shoulder under the pubes, instead of the shoulder bringing the head to the front above it.



TRUNK PRESENTATION.

Whence comes, then, the prevalent notion that the floor of the pelvis is an active power in effecting rotation? Does the pelvic floor, indeed, contribute nothing to this result? On the contrary, it contributes much, but not in the way that has been suggested. If the parturient canal were straight and continuous, the helix of the thread of the screw cut by the passing of the rough points on the presenting parts of the fetus would be very low; the fetus must needs traverse a great length of canal to cut a thread amounting to as much even as the quadrant of a circle. But with the aid of the resistance of the pelvic floor, which yields slowly and gradually before the advancing head, the helix may rise to the highest possible limit, and rotation may take place to the required degree during a very limited amount of direct advance.

On the other hand, if the pelvic floor were rigid as a board, so that advance could not take place, rotation must fail.

The observation so often made and so strenuously insisted upon by Berry Hart, that the first part of the presenting ovoid that reaches the pelvis is turned forward, is delusive only in respect of the deductions sought to be made from it. The fact is well established. But the meaning of it is that the part of the ovoid that first impinges on the floor of the pelvis becomes the pivot on which rotation takes place. When the vertex forms this pivot, the

face becomes the long arm of a lever of which the occiput is the short arm. As this pivot, then, is driven toward the pubes, the thickness of the anterior walls of the grooves cut by the inequalities of the face already described becomes more and more marked, and more and more promotes rotation.

This may be easily demonstrated by putting a floor of card-board in the skeleton of the pelvis, or taking any other circle, and while using one arm of a pair of compasses as the pivot, let the other be turned as the pivot is made to advance toward the pubes, or to a point on the circumference of the circle corresponding to the symphysis.

Thus, let b (Fig. IV) represent a ring formed by cutting a transverse section from the end of a cylindrical tube. Let now a rod be passed perpendicularly through the axis of this ring at a , with an arm c extending to the wall b , and cutting a groove into its substance. Obviously the groove so cut, the arm being symmetrical, will have each of its walls equal in depth. Now let the pivotal rod be advanced to a' , and turn it until the arm c will cut a groove at the intersection of the arc b' and b . This groove will have its anterior wall deeper than its posterior. Again advance the pivot to a'' and let the end of the arm c cut a groove at the intersection of the arc b'' and the ring b , when it will be found that the anterior wall of this groove will not only be deeper than its posterior wall, but the difference in the depth of the two walls will be greater than at the intersection of b' with b . Suppose this ring extended into a tube, and it

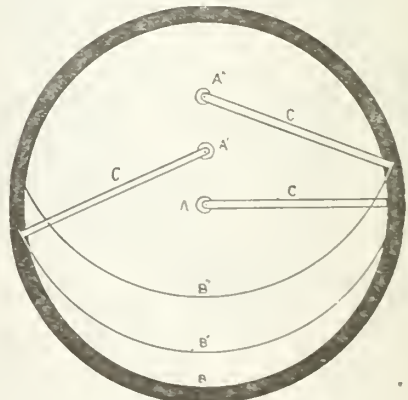


FIG. IV.

will necessarily result that as the pivotal rod is advanced the arm c will rotate in the direction of the point b .

If for this ring we substitute the female pelvis for the fetal vertex, and for the arm c ,

the face of the fetus, then we have a mathematical demonstration that rotation of the face must take place to the hollow of the sacrum, which *b* will now represent, whenever the vertex of the fetus advances, on the floor of the pelvis, beyond the center.

6. *Factors of Extension.* I incline to think that current explanations of the causes that determine the beginning of extension can be somewhat improved upon. Here also it is unnecessary to dwell upon the various teachings upon this subject, for they are sufficiently familiar to all readers. Let us first take up, as before, occipito-anterior positions. In these cases the head advances till the nape of the neck rests against the pubes. The advance of the child may or may not be for a time arrested; but in either case the elastic perineum and resilient posterior parts of the pelvic floor, which have been put upon the stretch, will press upon the head in a plane lower than that upon which the pubes impinge. The head, therefore, swinging on the occipito-atloid articulation as a hinge, will be forced forward. As the neck is prevented by the pubes from projecting forward, this movement necessarily results in extension. The notion that the same forces that bring the child down till the nape of the neck is arrested by the pubes, then operate in a direct manner to cause the chin to leave the sternum, appears unintelligible on any principle of physics.

If the occiput happens to remain posterior, hyperflexion will result from the causes named. If the breech presents, a bending forward of the hips takes place, the pubes here also acting as a fulcrum, while the vertebral articulations supply the hinge; the force, as in the other cases, being applied by the elastic structures of the pelvic floor at a lower plane than that of the pubes.—*American Journal of Obstetrics.*

THE TREATMENT OF TUBERCULOUS GLANDS OF THE NECK.—The subject on which I would speak is one which is of great and constant interest to every member of our profession, whether he be occupied in medical, surgical, or general practice—the treatment of enlarged glands, and especially of those of the neck. I will begin by making a general but strong statement, that for a branching scar upon the neck of a child, the result of abscesses in the cervical glands, some one, not the child, may be held worthy of blame. Sometimes it may be the parents who are to blame, in that they neglected to seek professional advice when the disease was appearing in a mild and manageable form, or who, having obtained skilled advice, declined to be guided by it. But more often the blame rests, I fear, with the medical

attendant himself. Often he has the opportunity of watching and treating the case from its very beginning, but it has gone on so slowly and quietly that he found it an easy and convenient matter to adopt a course of masterly inactivity regarding it, and the more so in that he felt that this accorded well with the views of the parents. But in such a case as this it is clearly the duty of the medical man to direct, not to acquiesce.

True, he may urge that he has given the ordinary and routine treatment a full and fair trial—that is to say, he has painted the neck with tincture of iodine until it was darkly stained and the skin was blistered and sore, and that afterward, when, in spite of this, the gland had passed into a condition of pathological bankruptcy, he had applied a long series of soothing poultices. Yes, this I know is the general treatment of enlarged cervical glands, at least as regards local measures, and I make the admission with sorrow.

Tincture of iodine, what would practice be without you? And to think that your chief virtue when thus employed resides in the stain which you leave upon the skin! Without its color property tincture of iodine would offer but slight attraction in general surgery, at least as an external application.

After a prolonged and disappointing course of this treatment the gland begins to break down in the center and to grow soft. Then too often the second part of the routine treatment is entered upon—the long series of poultices. In due course, the skin of the neck grows irritable and eczematous, and as the glandular softening continues it becomes dusky, sodden, and undermined. Still, nothing surgical—properly so called—is undertaken. Nature is allowed to follow her own course. I am not one of those surgeons who have never a good word to say for a poultice. But can moisture and warmth, applied to the surface of the neck, have any influence upon the condition of glands which are enlarging beneath the sterno-mastoid? I think not. But without doubt it can and does render the skin sodden and unwholesome, and therefore less prompt at healing when at last the gland is dealt with in a business-like manner.

Probably if the medical attendant had advised a more radical treatment, the parents of the child declined it, either because of an instinctive dread of operation, or because of a fear lest the scarring which must attend it should be more unsightly than that which would follow the spontaneous evacuation of the abscess; or it may be that the surgeon, unaware of the strength of his position, hesitated to urge that treatment which he surmised to be

the proper course lest, after all, the case did not turn out as satisfactorily as he had anticipated, and lest an unsightly scar should give a lasting and unfavorable evidence against him. His line of argument was sound enough from the point of view of the man of the world, but from that of the practical surgeon it was fallacious in the extreme. I speak with all respect of "natural surgery;" but we should no more leave these cases of enlarged glands to the unaided treatment of nature than we would a carious tooth or a suppurating joint. In the first place, nature is slow, and while she is arranging for the spontaneous opening of the abscess septic particles are being carried into the glands which lie next above and next below in the lymphatic chain. Thus, setting up inflammation in the surrounding structures, and rendering the skin adherent and undermined, she seeks relief from tension by carrying a lighted torch, as it were, among highly inflammable tissues. The surgeon who thinks it best to leave things to nature is encouraging suppuration which he can neither control nor guide, and when perchance he is at last compelled to take up the scalpel he finds a matted mass of muscles, vessels, and nerves bathed in pus, and scarcely recognizable.

The mucous membrane of the pharynx and tonsil is a likely area whence irritation may first reach the cervical glands. A transient attack of "sore-throat" may suffice to produce the swelling in the neck, for the net-work of pharyngeal lymphatics is in close communication with the concatenate glands; and for this infection contaminated water or impure air is often the blame.

There are two reasons for the dependence of the glandular enlargement upon absorption from the pharyngeal lining so commonly escaping recognition. The first is, that it is not always looked for, and the second is, that when the glands attract attention, and the throat is examined, the pharyngeal irritation may have entirely passed away.

As regards the dental lymph-shed and cervical adenitis, how frequently is a slightly carious tooth which may never have ached, or of which, if it has ached, the child has for obvious reasons made no complaint, been the cause of the trouble. I think that I ought almost to apologize for alluding to this obvious association, but from the frequency with which it is overlooked in practice I deem that no apology is actually needed. I will briefly say that I am sure that it would be an excellent thing if every child could be taken twice a year to the dental surgeon for examination and report. Of the influence which chronic irritation of the ear,

scalp, conjunctiva, and nose may have in causing the enlargement, especially in weakly children, I will say nothing more than that it must always be remembered, and the possibility of its existence should be inquired into in every case.

If the enlargement is on one side of the neck only, both sides of the head and face should be thoroughly inspected, and in a good light, for the lymphatic vessels do not take so regular a course as the veins, though for the most part they run as the veins do. Thus, I have had under treatment a case in which, as the result of a sore upon the *left* side of the tongue only, the lymphatic enlargement first occurred upon the *right* side of the neck. Evidently the lymphatics must have wandered across the middle line before finding a gland on which to vent their wrath.

Supposing that no cause for the enlargement can be discovered, not even a nasal catarrh, the child must be treated on general principles, and, if convenient, sent for a change of air. If it be admitted that miasmata be the not infrequent cause of the enlargement, it is at once seen why a change of residence should be so beneficial.

If the gland goes on increasing in size while the glands in the chain next above it and next below begin to swell, the sooner that all three of them are weeded out the better. For experience tells us that if left they will in due course, in all probability, become joined together, and that though they may at first be freely movable they will ere long be matted to the surrounding tissues, and form an unsightly projection at the side of the neck. Then the central part of the mass begins to soften, and the skin over it to become thin and discolored. I have heard the aspirator recommended in these circumstances, but in my opinion for dealing with this condition it is worse than useless. It may succeed in drawing off some little puriform fluid, but its tubular needle at once becomes choked; and, being taken out, leaves a track whence leakage occurs, and by which ferments can enter from without and render the abscess septic.

It may be that a gland whose central part has broken down has, in a few rare instances, undergone complete resolution and absorption, but the chance of this occurring in any individual case is so unlikely that for all practical purposes it must be disregarded.

There is not room for much difference in the methods of procedure. Before operating, however, the surgeon should let it be clearly understood that his interference will not necessarily put an end to all the trouble. Let him work as carefully as he can, some of the infecting

material may escape removal, and it is, I apprehend, more than possible that in an extremely unhealthy subject his operation may actually cause further progress of the disease; but experience tells us that if this contingency does ever occur it is altogether exceptional. For after extensive operations in necks of wretched children whose glands are involved in an advanced and widely spread decay, a vigorous clearance and erosion acts like the pouring of oil on stormy waters. But this much he can almost safely promise, that his operation, which will be associated with no great risk, may be trusted to effect a very great improvement, and that if it unfortunately has to be repeated it will probably have prepared the way for a final and completely successful attack. Then there is the alternative, which should have due weight when the operation is being urged; if nothing be done, the case must take its own tedious, unsatisfactory, and even perilous course.

The Operation. The hair should be cut short and the side of the neck thoroughly cleansed. Chloroform having been administered, a sufficiently free incision is made over the tumor—most likely along the anterior border of the sterno-mastoid. It is an error to try to keep the incision very small, for a good deal may have to be done through it—much more, perhaps, than the operator had anticipated. A cleanly cut wound promptly heals if its edges are carefully adjusted, and its site eventually marked by a scar of trivial dimensions.

Having made this incision through the skin, and perhaps at the same time the platysma and deep fascia, I lay aside the scalpel and expose the gland by working through the intermediate stratum of connective tissue with a steel director and forceps. Vessels entering the gland I tear through with two pairs of forceps, so as to avoid needless bleeding, and at last its only moorings are the lymphatic vessels which connect it with the glands above and below. In all probability these glands are also enlarged to a slight extent, and they are therefore weeded out along with the chief offender. If there should be any considerable bleeding—and as a rule there is not—it is easily checked by the temporary use of catch-forceps. I believe that this manner of dealing with the glands is much better than that of "dissecting" them out, and I think that the practitioner, who indeed may be assured that it is a simple and safe operation, is more likely to undertake it than he would be to adopt a prolonged dissection, unless, indeed, he happened to be keen with the scalpel and confident in using it.

The cavity is then to be syringed out with a

weak mercuric solution, and afterward dried by using a swab of mercuric wool. Having prepared some horse-hair by soaking it in a warm antiseptic lotion, I then put in sutures of that material with a fine needle which I introduce close to the edges of the wound. Through the lowest part of the wound I lay a few strands of horse-hair or a slender slip of drainage tube. One word more about the sutures. It may possibly be objected that when the wound is soundly healed and the scars, which were at first pink, have emptied their superfluous blood-vessels by continuous contraction of their substance, the positions of the sutures will be marked by minute white dots, which, placed at regular intervals along the sides of the chief scar, attract attention and cause dissatisfaction. One often sees such marks seriously detracting from the otherwise excellent results of a plastic operation—as after hare-lip, for instance; but if the sutures are taken out on the first or second, or at the very latest at the third day after operating, there is no fear of this contingency. And of all material for the sutures, nothing in my opinion answers so well as asepticized horse-hair.

A scrap of moist protective is then placed over the wound to prevent the dressings adhering, and over this a bulky pad of wood-wool is firmly bound by a bandage encircling the neck. The child being put back in its cot, no ordinary pillow is allowed, but a small junk is placed beneath the occiput, and the head is steadied between a couple of sandbags almost as large as a quartern loaf. From this position the child is not allowed to stir, either for feeding or for any other purpose.

Next day the dressings are removed without disturbing the child; the drainage material is withdrawn, as are also most of the sutures, though if it be thought expedient some few of them may be left for a day or two longer. These fine non-absorbent stitches can do no harm, and they may do much good in securing prompt union. The skin on either side of the wound is then drawn up and steadied by a couple of strips of waterproof strapping. If all the sutures have been withdrawn there will be no need for inspecting the wound for several days; so, to prevent the dressings becoming soiled when the feeder is being used, it is well to have them covered by a handkerchief which the nurse can change at her pleasure.

I am sure that there need be no hurry about getting the child up again; but when he is allowed to get up his neck should still be kept at rest by means of a stock of stiff buckram covered with linen, which is wide enough to reach from his chest to his chin and from his shoulders to his ears.

The account thus given is that of a simple case—such, indeed, as each should be if the best result is to be obtained, namely, a prompt recovery and a small scar. But, unfortunately, it often happens that almost as soon as the skin is incised pus escapes; and proceeding further, the surgeon finds that he has to deal with a suppurating cavity which incloses and communicates with the interior of a broken-down gland, and which also contains several enlarged lymphatic glands. The best that can be done is to lay open, scrape out, and irrigate the cavity, taking away or scraping out with a sharp spoon the wreckage of the broken-down glands, enucleating each of the enlarged glands, and making due provision for temporary drainage. But supposing that in this or in any other case a piece of a capsule or a gland has to be dissected away, it is hardly necessary to say that the scalpel must be made to “hug” the gland, lest troublesome hemorrhage or something worse result.

On very few occasions I have had to divide the sterno-mastoid in order that I might effectually deal with enlargements beneath it, but this is rarely needed. When, however, it is needed it is not such a serious matter as it might seem at first sight to be, for in these cases the muscle is so thinned and spread out as to be a structure of no great surgical importance. The operator of to-day must be prepared to sacrifice his old anatomical prejudices to surgical expediency.—*Lectsomian Lectures*, 1889.

PATHOLOGY OF CHOREA.—Dr. E. D. Fisher read a paper before the New York Neurological Society, March 4th, upon the pathology of chorea. His attention had been called to an article in the *Lancet*, in 1889, by Dr. A. E. Garrod, who affirmed that a temporary increase of connective tissue in the brain was observed in acute chorea of rheumatic origin. In the opinion of Dr. Fisher this would explain the principal phenomena of chorea, the presence of the connective tissue producing motor disturbance by irritation of the cortical cells or by interference with the regular transmission of motor impulses. All chorea was not due to a rheumatic diathesis; other blood-dyscrasie might take part. As Dickenson Hanford and others had shown, there are found in acute chorea general hyperplasia of the brain and cord, blood extravasations, embolism, thrombosis and dilatation of the smaller vessels. In chronic chorea these conditions have caused softening, secondary degeneration, and a fine general sclerosis of the brain.

The marked feature of chorea was a loss of inhibition, and, as in the majority of cases,

almost without exception in chronic chorea indeed, there was more or less mental defect, and, as again the muscles most severely and primarily affected were those of specialized action and therefore especially under cerebral control, the seat of the lesion primarily would seem to be in the brain. The occurrence of thrombosis of the cerebral sinuses and veins in chlorosis, with, as a consequence in some cases, blood extravasation, localized cerebral anemia, softening, secondary degeneration and sclerosis would seem to be a perhaps not uncommon factor in the causation of chorea.

The two cases of McLeod, in which, *post-mortem*, one showed a cyst compressing the left hemisphere and the other multiple tumors with atrophy of the convolutions over which they were situated, seemed to prove that degenerative changes of the cortex might cause the motor disturbance peculiar to chorea.

It therefore appeared that acute chorea was as amenable to treatment as the diathesis which induces it, while if the theory were accepted that chronic chorea was the result of sclerotic and degenerative changes in the brain, the prognosis became unfavorable and the possibility of cure by the removal of peripheral irritation, such as eye-strain, improbable.

ENLARGEMENT OF THE PROSTATE GLAND.—In a third paper on this subject in the last number of the *Journal of Anatomy and Physiology*, Mr. Griffiths, the assistant to the Professor of Surgery at Cambridge, arrives at the following conclusions: (1) That enlargement or hypertrophy of the prostate gland results from a growth of the gland tubules with their associated muscle, so as to form new gland substance, closely resembling in its structure the normal gland. This constitutes the first or glandular stage. (2) That after a variable time degenerative changes set in, which ultimately convert the new tissue into a mass of more or less dense, fibrous, connective tissue, containing only the atrophied remains of the glandular and muscular elements. This constitutes the second or fibrous stage. (3) That no enlargement takes place behind the urethra except when glandular substance exists behind and above the level of the vera montium in the situation of the “third” or median lobe. (4) That the so-called “tumors” are not in reality tumors, but merely pronounced localized enlargements of the gland, which pass through the same stages as the gland when enlarged as a whole. (5) That the muscular tumors (myomata) sometimes, though rarely, arise in the substance of the prostate, but that they are pathologically different from the ordinary local or general enlargement of the gland.—*Lancet*.

The American Practitioner and News

"NEC TENUI PENNĀ."

Vol. IX. SATURDAY, APRIL 26, 1890. No. 9.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

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(Signed by the editor.)

It is presumable that the editors of all the medical and pharmaceutical journals of the country are the recipients of the same or a similar letter; and in view of the fact that each editor is called upon to speak for his own journal, it goes without saying that the coming review will make a magnificent showing for the journals of the country. So fine, in short, that under the glare of the dazzling excellence of all the reader of the review will be so blinded that he will not be able to fix his eye upon any one as the cynosure of his literary or scientific preference.

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10. If any body, on reading the above, should suspect us of not being an impartial critic, we would suggest that he read the journal for a year and see if we have here come short of the truth. His name, with price of subscription inclosed, will be warmly welcomed in the sanctum.

11. This journal is the oldest medical publication in the State, and one of the oldest in the South. If the reader should doubt that it justifies existence, we trust he may at least allow that it somehow represents the survival of the fittest.

Notes and Queries.

NURSES AND DOCTORS—One of the most commendable movements of the last quarter of a century is the establishment of training schools for the education of nurses in connection with our large hospitals. The hospital trained nurse, since the time when Florence Nightingale went to minister to the sick and wounded soldiers in the Crimea, has made herself an indispensable need, and since the movement of educating women for this high calling was set going, thoroughness of work has been the object of those who have had the undertaking in hand. Not only has the nurse-graduate of to-day had a moral and educational training, but, before she leaves the wards of the hospital disease in its manifold forms and varieties has become familiar to her. She has had opportunities in these wards of studying more than disease; she has spent her whole course of two years in the company of sick persons, and has learned how they think and act, and she has acquired the art of ministering to their ever-present sufferings. Her education, in short, is clinical, but not entirely clinical, for the practical work is supplemented by a modicum of book work, enough to enable her to see the reason why symptoms occur and the principles on which an attempt is made to relieve them.

Under our present system of medical education does the young doctor enter upon his career as well equipped? After his three years' training he is supposed to have learned as much as the nurse, and a great deal more. He is expected to take charge of cases, form the diagnosis, and direct the treatment, hygienic and medicinal, and the nurse is to occupy a subordinate position and obey orders without a murmur. Now, suppose that both start with their first private patient, which knows the most about the case?

Take a case of typhoid fever, for example. The young doctor has read more, he understands the pathology better, and very probably can repeat the list of complications (learned at a quiz-class) more glibly than the nurse can. But he has never watched a case from beginning to end, he has not had an opportunity himself of intimately observing all the ins and outs of the disease, the peculiarities of patients, the frequency of occurrence and significance of complications. In short, he is worried and perplexed over his case and can not help showing it, while the nurse is at her ease and feels at home in her work. This is soon perceived by the anxious friends, and dependence soon comes to be placed upon the words and opinions of the trained nurse, while the reputation of the doctor gradually wanes. The fact is, the educational system by which our young friend was made a doctor is at fault. The nurse spent all her pupilage in the wards, the doctor spent all his time in the lecture-room. He learned science, she learned art; and patients like and admire art, while they, at the time of their sickness at the least, do not appreciate the beauties of science. Bedside experience was not required of him as a student, but nothing else but bedside experience is required of him as a practitioner. A dissecting-room and dead-house experience and training afford no comfort to a living patient.

The moral to be drawn from this comparison is obvious. If we are going to educate our nurses to such a high degree, we must educate our doctors to a very much higher one; to retain the confidence of the patient, the physician must be in supreme control of the case and of every one in connection with it. A nurse is

the assistant of the physician, as woman is by nature helpmeet of man. She understands her position when she accepts her duties, and these we find are done thoroughly; we ought, therefore, to see that our part of the duties is properly performed. Until young practitioners are sent out with more clinical training this happy state of affairs can hardly exist.—*N. Y. Med. Journal.*

CINCINNATI CORRESPONDENCE.—Dr. E. G. Zinke has been made adjunct Professor of Obstetrics and Clinical Obstetrics in the Medical College of Ohio by a recent action of the faculty. The doctor has been for many years assistant to the chair of Gynecology and in charge of the Obstetric Clinic in that institution, and has rendered good service. During the winter session just passed twenty women were delivered by students at their homes and in the college maternity, situated in the College building; five women were confined before the graduating class. In every instance the mother recovered without serious complication in the lying-in period, and the children were all born alive. This department is in this country the most difficult of all in which to conduct a clinic, and its possibility was not believed by many. The pioneer in this line was Prof. T. A. Reamy, who formerly delivered women before a class of three hundred and fifty students in this same college, creating quite a sensation in both medical and lay circles.

Cincinnati medical students can not complain of a lack of opportunities to witness abdominal sections. One clinical professor, Dr. T. A. Reamy, has made twelve laparotomies before the class during the winter term.

A case of cephalhematoma was recently under the care of Dr. Wm. H. Taylor in the Cincinnati Hospital.

Charity covereth a multitude of sins. The abuse of medical charities in this as well as in the old country is becoming a burning question. The benevolence of doctors of medicine has never been disputed. Much has been uttered and more remains to be said against the foolish and self-destructive charity of the medical profession. Mercy and medicine go

hand in hand. In several religions the idea of the Divinity is embodied in the Great Physician. Our heartiest thanks and our largest bills often emanate from the same source. If we look over our list and find those who, old dog Tray like, have done us the most good, we will find they have paid their bills. We are seldom taken above our own valuation, sometimes below. Let us, therefore, value ourselves highly. Although unwilling to designate our calling as a trade, yet we must acknowledge that medicine is a profession with a business side. Services which cost nothing are valued at their price. The latest freak of fashionable philanthropy is the multiplication of free hospitals. It is so English, you know. Medical men with axes to grind, who can not grind them in the older hospitals, get churches and societies excited, and start up new hospitals for their own glorification. This multiplication of free hospitals and free dispensaries is disastrous, in that many who are in no way objects of charity are admitted, and the income of the profession is curtailed. Why should not the saving of life, the relief of pain, and the removal of deformity have a value as intrinsic as coffee, sugar, and flour? If philanthropists will give, let them endow professorships and laboratories. Cincinnati has suffered severely from this hospitalism during the last year or two. She has two large public free hospitals, and seven small private free hospitals, besides some private pay hospitals and numerous free dispensaries. Is this not bidding for paupers? Is it not prostrating the profession? Are we not robbing ourselves?

Dr. C. D. Palmer, Professor of Obstetrics and Gynecology in the Medical College of Ohio, and Gynecologist to the Cincinnati Hospital, has, with the valuable mechanical assistance of Max Woche & Son, of Cincinnati, instrument manufacturers, gotten up a new forceps. The following are the points: Long forceps, weight $18\frac{1}{2}$ oz., length 14.5 in., fenestrate 4.81 in., distance between blades 2.87 in., distance between tips of blades 0.75. They have a good pelvic curve and a double cephalic curve in blades, and an English lock. The handles have a slight backward curve equal to forward curve of pelvic blades. There

are tractors on the handles, and the handles consist partly of wood and partly of metal.

The short forceps have a weight of only 12 oz., and a length of but 11.27 in. The fenestræ of the blades are 4-4.18 in. long. The shanks are like Simpson's, the lock English. The distance between the blades at their widest part and at the tips is about the same as long forceps; the handles have the backward curve also.

In the selection of Dr. James H. French as secretary of the Cincinnati Academy of Medicine at its recent election, that body has chosen a man who will hold the interests of the Academy above self, who will fill with ability and credit the post assigned him, labor always for peace and prosperity, and avoid strife and deterioration.

The Cincinnati Hospital report, about to be published, will contain the following facts. Whole number admitted during the year, 3,654. Of these 81 were moribund, and died within 12 hours, unamenable to treatment, leaving 3,573, of whom 244 died, which shows an average rate of mortality of 7.1 per cent, which is less by .6 than in 1888. The mortality in the different wards was as follows: Medical 12 per cent, surgical 3 per cent; obstetrical 1.4 per cent, gynecology 7.5 per cent, children 8.7 per cent. The mortality in gynecology exclusive of cancer was reduced to 2 per cent. The average length of time in the hospital was less than last year.

The Clinical and Pathological School of the Cincinnati Hospital had 335 matriculants during the past year. The new amphitheater for clinical lectures is a most elegant one in all respects. The training school for nurses is doing some good work.

At a recent meeting of the Cincinnati Medical Society Dr. Wm. Carson reported the case of a boy who was alleged to have hydrophobia, but the symptoms were explainable on other grounds. Dr. W. L. Mussey reported a case of feigned hydrophobia, which was cured by the electric brush. Dr. J. A. Thompson was of the opinion that the majority of cases of hydrophobic convulsions in the dog were due to uremic convulsions.

College commencements in Cincinnati this

year resulted as follows: Medical College of Ohio, 91 graduates; Miami Medical College, 31; Cincinnati College of Medicine and Surgery, 22; Ohio College of Dental Surgery, 65; Cincinnati College of Pharmacy, 23. This does not include Eclectics and Homeopaths. The Medical College of Ohio has determined on a four years' course of study.

The Cincinnati Academy of Medicine did itself the honor of electing to a second term of service as president, Dr. C. D. Palmer. The doctor was elected to fill this position two years ago, and after serving but two months was disabled by an almost fatal accident. The doctor will fill the chair with dignity, and his rulings will be those of wisdom. Under his management the scientific interest in the society will improve, and it is to be hoped the attendance will be greater. The doctor said in his inaugural address that the Academy became a school of instruction, to teach and to learn. Each member becomes a teacher and a pupil. He recommended special attention be given to bacteriology, the etiological and bacteriological origin of many diseases; in medicine the subject of phthisis in some of its points, and in surgery the pathology of cancer and the special field of brain surgery; in obstetrics, ectopic gestation, its best management in the different forms and durations, also the degree of pelvic deformity requiring the performance of polalic version or the use of obstetric forceps, craniotomy or cesarean section; in gynecology, the limitation and extent of the justifiability of vaginal hysterectomy, and the special utility of some form of the electrical current in the treatment of some forms of female pelvic disease—the frequency and justifiability of ovarian extirpation. These subjects, he thought, should be entertained and elucidated. Of the new remedies which come before the profession many are not worthy of the powers accredited to them. We owe our part to do what we can to fix the correct status of the medical power of each new remedy. Also some old remedies have been found to possess new uses. Electricity is as yet not fully understood. He called this society and its place of meeting our chamber of commerce, and said it should be our place of meeting and exchange

of views and conference on business matters. It should be a social reunion of its members once a week.

E. S. M'KEE, M. D.

THE CRIME OF MEDICAL NEGLECT.—Dr. Rooney, coroner of Brooklyn, having in his district a settlement of those fanatical believers in faith-healing and disbelievers in medicine called the "New Evangelists," has observed with concern the growing death rate among these people, not alone by diphtheria, but by other affections of the non-contagious class. Fortunately, it would appear the highly infectious diseases have not attacked them; but in view of the havoc that might be wrought in the community if such an attack should occur, and in view of the defects in our laws bearing upon the crime of medical neglect of minors and others, it is reported that Dr. Rooney has under consideration the subject of more stringent and explicit regulations. These will probably be provided for in a bill which is to be framed to meet the newly risen dangers to the public health. These people, for the most part, profess to be obedient to the laws of the land, and it might be well to enact a law that will make it plain to them that it is a criminal thing to neglect to employ agencies of known curative power where infants and other helpless persons are involved, and criminal, also, to wantonly neglect isolation and quarantine in cases of contagious disease. Within a few days past fresh cases of this kind of neglect have been called to the attention of the grand jury of Kings County, which has found bills of indictment against the accused faith-curers, and has urged the immediate prosecution of the charges. New laws must be made as emergencies arise; the punishment must be made to fit the crime, even if that crime is an outgrowth and perpetrated in the name of a religious belief. *Salus populi suprema lex.*

Since the foregoing was written it has been announced that the persons in question have informed the authorities of their intention to provide medical attendance for their sick in the future.—*N. Y. Med. Journal.*

THE Kentucky State Medical Society meets at Henderson, May 14th.

IMPORTANT RESEARCH.—We ask the attention of our readers to the following important circular from Dr. Belfield:

I am collecting, for publication, cases of operation upon the prostate, particularly those for the palliation or cure of the so-called prostatic hypertrophy. To this end I venture to presume upon your courtesy with the request for information concerning cases within your knowledge, where the operations named below or others designed to secure the same result have been performed. If already published, a simple reference to the periodical will enable me to secure the information; concerning unpublished cases, I would be thankful for the following items:

Date, age of patient, previous use of catheter, complications (stone, etc.), nature of operation, immediate result, subsequent history, operator (reporter).

The operations about which information is requested are:

1. Supra-pubic prostatectomy.
2. Perineal prostatotomy.
3. Mercier's or Bottini's operation.
4. Incidental removal of portions of prostate in operations for stone, etc.
5. Institution of artificial urinary channel in cases of prostatic obstruction.
6. Operations for malignant or tubercular diseases of prostate or bladder.
7. Operations on seminal vesicles.
8. If supra-pubic operation, whether bladder wound was left open or sutured; whether special incision for drainage was made, to what extent bladder was distended or distensible, whether rectal bag was used, whether peritoneum was injured.

The source of information will of course in every instance be printed.

W. T. BELFIELD, M. D.,
612 Opera House Building, Chicago, Ill.

THE only Chinese physician in the United States has just registered at the Health Office in Brooklyn, N. Y. He is Dr. Joseph C. Thoms, and has his office at 336 Greene Avenue. He graduated from the Long Island College Hospital with honors at the last commencement. He is about twenty-five years of age.

THE MEDICAL PROFESSION OF THE STATES OF NEW YORK, OHIO, ILLINOIS, INDIANA, AND IOWA.—The undersigned requests the members of the medical profession in the above named States to forward, at their earliest convenience, the following points: Name in full, School of graduation and year, Post-office address, State.

This will be used in the pages of the Medical Register Directory and Intelligencer, Dr. William B. Atkinson, editor. A copy of the book, printed on good paper, nicely bound, will be forwarded to each physician whose name appears in its pages, without charge.

The matter in preparation for it is of value to the profession for constant reference. Its list of national and local medical organizations and post-office addresses of physicians will be complete to date of issue, besides other valuable information. George Keil, Publisher, 1214 Filbert Street, Philadelphia.

THE State Medical Society of Arkansas will hold its fifteenth annual meeting at Little Rock, Ark., Wednesday, Thursday, and Friday, May 14, 15, and 16, 1890. Special attention is called to the following extract from the Transactions for 1889: "On motion the Committee of Arrangements was instructed to prohibit, in the future, the exhibition of secret or proprietary articles in connection with the meetings of this Society." L. P. Gibson, M. D., Secretary. Officers: President, Zaphney Orto, Pine Bluff; Vice Presidents, First, T. E. Murrel, Little Rock, Second, J. T. Clegg, Siloam Springs, Third, R. M. Wilson, Columbus, Fourth, W. P. Owen, Hazen; Assistant Secretary, Edward Meek, Argenta; Treasurer, A. L. Breysacher, Little Rock.

SPECIAL NOTICES.

IN the March number of the London Medical Recorder appears the following article, commendatory of a well-known American product:

"Listerine is an antiseptic and deodorizing preparation which has for many years been a favorite with American surgeons. Its qualities are due to the essential antiseptic constituents of thyme, eucalyptus, baptisia, gaultheria, and mentha arvensis, in combination with which is associated a stated quantity of benzo-boric acid. Experience points to its reliability in obtaining that condition of asepsis which is the ideal of every surgeon, and it has the distinct advantage of being

fragrant and non-poisonous. Its antiseptic and anti-fermentative properties are not confined to lesions of the surface structures, and it is largely used for internal medication, in doses of a teaspoonful, in suitable cases. It does not coagulate serous albumen, and it is thus free from the drawback which so markedly limits the action of such agents as corrosive sublimate, most of which are, moreover, extremely poisonous. Listerine, then, is an agreeable and powerful antiseptic and deodorizer, well adapted for ordinary surgical work, available for internal administration, and useful for gargles, mouth-washes, and lotions, for which purpose it may be employed without hesitation, seeing that no mishap can occur, even in unskilled hands."

DR. PREVOST, Cambremer, Calvados, France, says: I tried Aletris Cordial in the case of a young lady twenty years of age, who for the last seven years ever since she attained the age of puberty, had been most irregular in her periods. She had consulted various doctors who had all prescribed for her, but none had succeeded in affording her relief. She is a girl of irreproachable character, and is certainly not *enceinte*. Sometimes her periods occur at intervals of four months, sometimes three, and at others six. Eventually she came to consult me, and I prescribed Aletris Cordial, having already used it in another case with very good results. She is already very much better. I have also used it for a young woman of twenty-two years of age, who was suffering from peritonitis consequent on her confinement, which, although it passed off well, was not without subsequent *centretemps* of a serious nature. Three months elapsed and her periods had not resumed. I gave her the Aletris and her periods reappeared copiously. She is now in excellent health. I also gave it to a young girl of seventeen or eighteen, who was similarly situated as the first named, and in this case it answered admirably.

URIC DIATHESIS—Please accept my best thanks for the Lithiated Hydrangea (Lambert) you forwarded to me for the purpose of making trials in my practice. To know that this pharmaceutical product contains the Benzo-Salicylate of Lithia, sufficed to induce me to prescribe it in full confidence to a certain class of my patients, and I have obtained most satisfactory results from its administration, especially to those suffering from Gout and Rheumatism, improvement being rapid, and manifested after but a few doses of the Lithiated Hydrangea had been administered. I am continuing my observations with said preparation in order to gain a more thorough knowledge of its therapeutical effect in cases of Cystitis, Hematuria, and Renal Calculus.

F. VIDAL SOLARES, M. D.
Calle de Vergara, num. 12, Barcelona.

THE REPORT OF THE NEW YORK ANALYST OF DRUGS shows that the chances for getting drugs of good quality on prescription is 43.8 per cent; fair, 17.4; inferior, 26; NOT AS CALLED FOR, 11.6; excessive strength, 1.2.—*Times and Register*, Philadelphia, Dec. 7, 1889.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., MAY 10, 1890.

No. 10.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

THE PHYSICIAN'S PLACE IN GYNECOLOGY.*

Observations on the Utility of Constitutional Treatment in the Chronic Diseases Peculiar to Women.

BY THOMAS MORE MADDEN, M.D., F.R.C.S., ED.

Examiner, Conjoint Board of Royal College of Surgeons and Apothecaries Hall, Ireland; Obstetric Physician, Master Misericordiae Hospital; Physician, Hospital for Sick Children, Dublin; Consultant, National Lying-in Hospital; Socio Corrispondente, Con Medaglia d'Oro, del Associazione dei Benemerite Italiani; Ex-President of the Obstetric Sections of the British Medical Association, and of the Academy of Medicine, etc., etc., etc.

In compliance with the courteous invitation of the President, the following communication is submitted to the Texas State Medical Society, in hope of affording some illustration of the fact on which I have elsewhere enlarged, viz: That gynecology is no narrow specialism, and that the diseases peculiar to women in many instances afford as much scope for the services of the general physician as for those of the professed specialist. At long intervals, on previous occasions, I have more than once endeavored to show the advantage of conjoining constitutional treatment with the local measures so exclusively relied on in all gynecological cases. As my papers on this subject in the "Transactions" of the now defunct Dublin Obstetrical Society, and in the Journal of the British Medical Association, are probably unheard of by my present readers, and contain some matter the practical importance of which is, I think, deserving of greater consideration than this subject has yet attracted, I

therefore venture to return again to its discussion, although in so doing I must needs reiterate some former observations which subsequent experience and reflection have confirmed.

Indeed, quite apart from its actual practical importance, this subject is of much interest as a remarkable exemplification of the periodicity with which various medical questions that long ago were debated and apparently finally settled, again, after a lapse of time, crop up, and are once more rediscussed by another generation with all the interest of novelty. To some extent this possibly may be accounted for by the pace at which we live being now so rapid that most practitioners have enough to do to keep abreast of the daily progress of medical science, and have little leisure for any reference to its older literature. I have elsewhere enlarged on the benefits derivable from the acquisition of some little tincture of learning and medical scholarship, even to the busy practitioner of medicine, and have pointed out that some of the most valuable of our so-called modern improvements in gynecology and obstetric surgery—such, for instance, as the method of dilating the cervical canal for endo-uterine exploration or treatment, the local application of nitric acid in uterine diseases, the uses of vaginal speculum and uterine sound and the employment of the anesthetics before surgical operations—are all revivals of old and disused practices as so-called modern discoveries for, as Chaucer has it—

"Out of the old feldis, as men saith,
Comith all this new corn fro yere to yere;
And out of old bokis, in good faith,
Comith all this new knowledge that men lere."

Thus, upward of forty years since, the comparative utility of local and general remedies in uterine disorders was disputed in the medical journals of that time by Dr. Henry Bennet,

*From advance sheets by author.

Mr. Acton, and other pioneers of the then infant science of gynecology, on the one side, and Dr. Robert Lee and his no less strenuous co-adherents of the old school of constitutional treatment on the other, with a vehemence and warmth akin to that displayed by some abdominal sectionists of the present day when any criticism is made on the line of practice in which they excel. Long subsequently the same subject of contention has more than once been introduced on the arena of medical debate. As already mentioned, fourteen years ago I was responsible for raising a discussion "On the Constitutional Origin and Treatment of some Uterine Disorders," in the Obstetrical Society. The same question was afterward handled from a different point of view by Dr. Clifford Allbutt, and several years later it was again brought before the British Medical Association by Dr. Playfair and myself. With regard to Dr. Clifford Allbutt's views I may here observe that it appears a mere waste of time and energy to declaim, even as eloquently as he and others have done, against that prevailing tendency to specialism in all branches of the healing art, of which they seem to consider gynecology to be the most reprehensible outcome. In the existing development of medical science this subdivision is not only inevitable in all large centers of population, but it is moreover obviously desirable in the interests of the profession as well as of the public. For by the latter it is generally and fairly concluded that physicians who confine themselves to a comparatively limited field of special practice will probably acquire a greater experience therein than is possible to those whose vocation extends equally over every department of the wide domain of medicine, surgery, and obstetrics. Under such circumstances they who now strive to resist specialisms in medical practice are attempting a task as vain as was Dame Partington's effort to keep back the Atlantic with her broom. At the same time, however, it is also no less obvious that no man can ever successfully or efficiently cultivate gynecology or any other medical specialism who is not thoroughly versed in the general principles of medico-chirurgical science.

Of all the many subdivisions of medicine

gynecology is unquestionably the most unstable in its routine practice. Not only does it vary from time to time in accordance with the progress of the sciences on which it rests, but moreover it appears to undergo at frequent intervals other changes of a purely arbitrary character. Thus, for instance, the influence of fashion is hardly more marked in the changing modes of dress of our clients than in our methods of dealing with their utero-ovarian complaints, in which we have daily proof of the poet's words—

"In physic as in fashion we find

The newest has ever the run of mankind."

Hardly a decade passes in which the practice of gynecology is not in this way revolutionized by some theory which is loudly heralded into existence, and having its brief day, and perhaps served its purpose, is then hurried into the limbo of oblivion.

A brief reference to the doctrines which have within our own recollection thus influenced this branch of practice may be sufficient to show why it is that such misconceptions have prevailed with regard to the respective uses of constitutional and local treatment in utero-ovarian disorders. When I entered the profession, Dr. Henry Bennet's theory concerning chronic inflammation and ulceration of the uterus was still almost universally adopted. At that time hardly any woman whose symptoms could be perverted into those which were supposed to indicate uterine disease, as then understood, escaped the repeated vaginal examinations and cervical applications of nitrate of silver, potasse cum calce, and other escharotics in vogue. In this way it was that in those halcyon days of early gynecology many a practitioner speculated his easy way to fame or fortune. At length, however, this facile line of practice became played out, and the cylindrical speculum and stick of caustic ceased to draw crowded consulting-rooms. Then was started the, perhaps, better founded uterine displacement doctrine of gynecological pathology, acting on which, for the past fifteen years, the followers of Dr. Graily Hewitt were primarily occupied in undoing the mischief occasioned from the abuse of escharotics by their predecessors, and subsequently have ex-

hausted their inventive fertility in designing new pessaries or remodelling or renaming old instruments. More recently this mechanical view of uterine complaints has been to some extent displaced by Dr. Emmet's widely-accepted teachings with regard to the influence of cervical lacerations in the causation of congestive hypertrophy of the uterus; and also by the adoption, in modern practice, of the theory as to the ovarian or tubal origin of many of the diseases peculiar to women, and their consequent curability by oöphorectomy, or by salpingotomy. The original germ of this doctrine may, I think, be traced to Dr. Blundel, but whether resuscitated or original matters little, as its practical development dates only from the comparatively recent period when it was brought into special prominence, much about the same time in America, Germany, and England; and at the present day the operations known by the names of Battey and Tait are resorted to in almost every country, and in some cases with a frequency of which I should hesitate to regard myself justified, even by the results claimed, from imitating, without imperative necessity. For my own part, I would here again observe that, while recognizing the fact that in some instances of pyosalpinx and hydrosalpinx the removal of the diseased uterine appendages affords the only available means of treatment, I have not, in my own experience, found laparotomy operations as generally necessary in such cases as they are apparently now deemed by others. On the contrary, I am confirmed, by increasing observation, in the belief that in some instances both ovarian and tubal diseases, more especially in the later cases of hydrosalpinx, may terminate favorably without any surgical treatment, and, moreover, that in the later cases such collections, whether purulent or serous, may be evacuated by cautious aspiration through the vaginal roof. I had an opportunity of again proving the advantages of this method of treatment in the case of a lady who, after many months of suffering, was sent to me from a distant country to have the affected uterine appendages removed, but whom I succeeded in relieving of her trouble, with the assistance of my friend Dr. Duke, by remov-

ing about ten drams of fluid from the distended duct. I would, therefore, still urge the expediency of a fair trial of other less serious methods of treatment before resorting to the extirpation of the uterine appendages in these cases generally.

The foregoing is, I think, a fair summary of the principal theories that have affected gynecological practice during the past twenty years. All of these point to exclusive employment of different forms of local and mechanical treatment in the cases included within their scope; and each of them, however applicable in many instances, has been extended to a still larger number of cases beyond its legitimate application. Specialism of this kind has thus gradually led to the crowding out of the general physician from his former place as the recognized custodian of the health of "all classes and conditions" of suffering humanity, female as well as male.

The diseases peculiar to women may, for practical purposes, be here considered as divisible into two classes—namely, those that really demand no special local treatment; and, secondly, those in which this is essential and indispensable. Besides these, however, there remains a third category of patients in whose case the question as to whether local or constitutional treatment, or both, is indicated, fairly arises. In the latter may be included—firstly, all instances of utero-ovarian hyperemia, or congestive hypertrophy of the uterus and its appendages; secondly, those obscure cerebro-nervous disorders which are peculiar to women; and, thirdly, in this connection are many uterine neoplasms, or fibro-myomata.

From my own experience I would say that the most frequent immediate cause of chronic impaired female health is endometritis extending to the uterine appendages, or utero-ovarian and tubal inflammation. Thus, rather more than one tenth of all the patients under my care in hospital or at the Dispensary for Diseases of Women suffer from endometritis or cervicitis, and in private practice I have found the proportion of these cases fully as large. The consequences of chronic inflammation of the womb and its appendages are as important as its frequency. In some instances chronic

metritis occasions hypertrophy and ulceration of the cervix and os uteri, vaginitis, and leucorrhea; in others congestion and enlargement of the fundus, eventually causing flexions and displacements of the womb; and in others again it extends to the fallopian tubes and ovaries, producing menstrual irregularities, sterility, and hysteria in all its forms.

Sterility almost always accompanies this disease, and as long as it exists to any serious extent the patient must remain barren. This fact, which I regard as one of great importance, is too generally ignored in practice. I have known instances in which patients were subjected to surgical treatment to overcome some supposed mechanical obstacle to impregnation, and who nevertheless remained childless, no attention having been paid to the most frequent cause of sterility, namely, the existence of chronic inflammation, on the subsequent cure of which pregnancy has immediately followed.

Ovarian or tubal inflammation, manifested by soreness, tumefaction, and occasionally burning pain in the ovarian region, is one of the most common consequences and accompaniments of endometritis. In these cases the inflammation extends from the uterus, along the fallopian tubes to the ovaries; and hence patients thus affected are sterile for the time being.

The treatment of the affections now under consideration is still vague and unsatisfactory, generally extending over long periods of time and often unrewarded by the cure of these diseases, their predisposing causes being, as I believe, overlooked in practice. Of the predisposing causes of chronic inflammation of the uterus and its appendages, by far the most frequent is the scrofulous diathesis. Some years ago I observed, and called attention to the fact, that a large proportion of the patients attending my Dispensary for Diseases of Women were of a well-marked strumous habit of body, or actually suffered from glandular or cutaneous scrofulous affections. In such cases uterine complaints are necessarily impressed with the constitutional taint.

Women are supposed to be in a great measure exempt from gout. This opinion is cer-

tainly unfounded with regard to anomalous gout, which attacks women quite as much as men; and in the former affects the uterus as commonly as regular gout does the joints in the latter. There is no reason why the gouty diathesis should be confined to men. Gouty parents generate female as well as male children; any hereditary disposition must be shared in by both alike, and the exciting causes of the disease are obviously not limited to either sex. Many of the symptoms which Gooch described under the name of irritable uterus, and which modern gynecologists have transferred to the account of displacements of that organ, are oftentimes produced by gout, and may occur independently of any mechanical cause, though they may also coexist with and be intensified by any of the various malpositions of the uterus. Thus, in a paper on this subject, which I published in the *Lancet*, I instanced the case of a widow lady, aged about thirty, who had for years been suffering from lumbar and pelvic pain, extending down the left thigh, and accompanied with lameness, dysuria, and slight uterine catarrh. The cervix uteri was congested and the os patulous, the sound penetrated five inches, and the fundus was tilted backward. Before she consulted me she had been treated by others for retroversion by mechanical expedients only, and for a long time I did the same. Every pessary, and the number was almost countless, that I tried, however well it might fit, was practically useless; before a week's time she would limp into my study in as bad a plight as ever. I need not go through the details of the case further than to add that I learned at last that she inherited gout, and, on examining, found her urine laden with uric acid. She was then treated by alkaline remedies and colchicum and sent to Vichy, whence she returned with all the symptoms relieved, and, though yet necessitated to wear a Hodge's pessary, thenceforth remained practically free from any further discomfort.

With regard to active local treatment in ordinary cases of chronic inflammation of the uterus and its appendages, Talleyrand's advice might be advantageously adopted by gynecologists, *Surtout point de zèle*. If we trusted more

to constitutional remedies, and above all to the judicious employment of certain mineral waters in such cases, I verily believe that in many instances our patients would get well sooner than they do when the local irritation is increased *secundum artem* by frequent examinations and the repeated application of escharotics or the curette.

In the management of such cases there can be no question that our primary care should be the removal, by appropriate treatment, of any existing uterine or ovarian disease or displacement of which constitutional disorder may be symptomatic. But at the same time it should also be observed that in the majority of these instances local treatment is only necessary for the rectification of some flexion or displacement, and that in many cases both the local complaint and its secondary consequences may be benefited by constitutional measures, more especially by the various bromides and other nerve sedatives by which the abnormal activity of the nerve centers in hysterical cases may be allayed.

In cases of hysteria connected with amenorrhea, ferruginous tonics, and more particularly some of the natural chalybeate springs, are obviously indicated. If the patient's circumstances admit of it, these latter should be used at their source, and thus the patient will be afforded all the advantages not only of the chalybeate water, but also of that change of climate, mode of living, and occupation which are so potent in the cure of those nervous complaints that are commonly associated with chronic uterine disease.

In such cases the physician, as I before observed, must above all rise above a narrow gynecological specialism. As already said, he must primarily look to any uterine or periovarian trouble; but, in doing this, he must guard himself against the possibility of increasing the existing local hyperesthesia by any topical treatment which is not absolutely indispensable. He must, further, in these instances strive to act on the moral as well as on the physical constitution of his patient. He should insist on healthy occupation of mind as well as of body, and fit the latter for the constitutional remedies called for by the special

exigencies of each case. If the hysterical condition be consequent on disordered menstruation, this must be corrected; if it results from undue stimulation of the sexual functions, the physical and moral evils consequent on such abuses ought to be clearly pointed out.

It has been already observed that, besides the strumous diathesis, various other constitutional taints frequently underlie and are the starting point of certain forms of chronic utero-ovarian disease, and hence the importance of the recognition and treatment of these constitutional conditions in many of those gynecological cases in which topical measures are too generally exclusively relied on. Thus, in cases of gouty origin the preparations of colchicum and alkaline remedies, such as the mineral waters of Vichy, should be employed. In rheumatic uterine disease iodide of potassium must be administered before the patient can be cured, and in that dependent on syphilis the remedies appropriate in other venereal affections are here as indispensable. As a rule, chronic congestive hypertrophy of the uterus and its long train of secondary consequences, when not of strumous origin, requires the use of mercury, especially the perchloride, which is best given in such cases in small doses—the one twenty-fourth of a grain three times a day, in tincture of bark.

The prevailing type of all chronic uterine diseases is essentially asthenic, and demands the exhibition of tonics, and more especially indicates the employment of some of the natural chalybeate waters whenever their use is practicable. The curative effect of these and other mineral waters, as well as of change of climate, is a subject on which I may speak with some confidence, having given attention to it during several years of health-travel and clinical observation abroad and at home, of which I have published the results in my works on "The Spas of Germany, France, and Italy," and again in "The Health Resorts of Europe and Africa." From that experience I may, therefore, remark that hysteria in some form is generally associated with chronic uterine disease, and this condition—which is generally curable by constitutional treatment, and more especially by change of air and the use

of various mineral waters—nervous and complicates most of the symptoms for which gynecologists are consulted. Counterfeiting every malady, acting through and upon the nervous system, attended with groundless apprehension, depression of spirits, and morbid irritability of temper, oftentimes rendering the patient herself as miserable as she renders those about her, this disease is closely allied to that graver nervous lesion which constitutes insanity, and, if unchecked, may pass into it. Local treatment, except to rectify some displacement or subdue well-marked tubal, ovarian, or uterine inflammation, is of little utility in such cases; nor are the tonics and antispasmodics usually relied on comparable, in their therapeutical effects in restoring a hysterical woman to the *mens sana in corpore sano*, to the saline chalybeate waters, such as Ems, Schwalbach, or Spa, provided these be used at their source.

The use of a remote spa in these cases is something beyond the benefit to be derived from the mineral water. The functions of the liver and bowels, commonly torpid in hysterical women, are stimulated by the change of living, and a sedative effect is generally produced on the hyperesthetic condition of the patient. Moreover, the changes and incidents of the journey suggest new ideas, by which the patient's mind is diverted from that morbid concentration on her ailment which characterizes hysteric disease.

Among the mineral waters that may be employed in the treatment of chronic uterine and peri-uterine complaints, the iodated and bromated saline springs, such as Wildegge, Woodhall-Spa, Kreuznach, Adelheidsquelle, Hall, and Salzhausen, deservedly hold the foremost place. These waters act as special stimulants to the mucous membranes and glandular system, promote absorption, occasion ptyalism and diuresis, quicken the appetite, and produce the resolution of glandular enlargements. Hence their singular efficacy in the treatment of the diseases of women produced by chronic uterine hypertrophy, the result of congestion or chronic inflammation of the womb; and especially in cases of sterility which are thus occasioned.

The second class of mineral waters applica-

ble to the treatment of the diseases now under consideration are the chalybeates, both simple and saline. The former are those most resorted to by sufferers from chronic diseases of the womb, and are especially adapted for the treatment of chronic inflammation of the uterus and its appendages and uterine or vaginal leucorrhœa, associated with anemia, as well as in the constitutional debility and loss of tone so frequently produced by, as well as conducive of, uterine irritation, inflammation, or congestion. Chalybeate spas also exercise a marked curative action in cases of hysteria dependent on these causes as well as in many instances of sterility. The principal simple chalybeate waters suitable for such cases on the Continent are Spa, Pyrmount, Brüchenan, Schwalbach, and Driburg. Of all these natural chalybeates I have in my own experience found none so generally beneficial in the treatment of the chronic diseases of women just referred to as the waters of Schwalbach. Their utility, both by baths and by internal administration in such cases, is a fact of which I have had ample clinical demonstration. Moreover, the springs of Schwalbach are probably the most palatable as well as the most potent waters of their class in Europe.

The saline chalybeate springs may also be used in various forms of chronic uterine disease producing anemia and complicated with abdominal and other enlargements, and, according to my experience, are particularly serviceable in the disorders of the climacteric period and in the utero-ovarian complaints so commonly caused in European women by long residence in India or other tropical climates. These springs generally contain the salts of soda in combination with iron, and among them those most suitable for the cases we are now considering are the Stahlbrunnen of Homburg, Franzensbad, Bocklet, and at home, Tunbridge Wells and Cheltenham.

Sulphurous mineral waters are the third class which I regard as applicable for the treatment of the conditions above referred to. Thermal sulphurous spas, being strongly stimulating, can only be used in cases where the patient's constitutional state is not plethoric, and where there is no danger of enkindling

latent inflammation, and thus converting a chronic into an acute disease. The warm sulphurous springs that are available for the treatment of chronic inflammation of the womb are Schinznach in Switzerland, Baden on the Limmat, Aix-les-Bains, Eaux-Bonnes, and Amelie-les-Bains. Cold sulphurous waters, such as Lisdoonvarna, Harrowgate, Engheines-Bains, and Plombiers, may also and with greater safety be employed in some cases.

Whenever uterine, ovarian, or tubal dysmenorrhea is present, there are no remedies of such universal applicability as the chemically indifferent thermal baths, such as those of Pfeffers, Schlangenbad, Gastein, Wildbad, and Chaudfontaine, all of which exercise a powerful sedative effect on the nervous and vascular systems, and are especially suitable for female complaints associated with hyperesthesia and hysteria, or abnormal nervous susceptibility. Besides these, the thermal arseniated waters of Mont Dore and St. Nectaire, both in the volcanic district of Auvergne, may be used in uterine disorders of either scrofulous or neuralgic origin. The warm mineral waters of St. Sauveur, in the Eastern Pyrenees, which, in addition to their high temperature, contain a large amount of the peculiar pseudo-organic unctuous substance termed "glairine" or "barégine," have a great and, I believe, well-merited reputation in France in the treatment of scrofulous, rheumatic, and neuralgic affections, as well as in hysteria, leucorrhœa, and other complaints resulting from chronic uterine disease.

Medical Treatment of Uterine Tumors. Having elsewhere published the results of a somewhat extensive clinical experience of the various intra-peritoneal and vaginal operations, and also of the later and most promising electrolytic methods now employed in these cases, I may in this connection add a few words in reference to the generally neglected, and in many cases efficacious, medical treatment of myomata. The time thus occupied will not be altogether wasted if I can succeed in showing that the possibility of arresting the growth of these tumors by appropriate non-operative treatment, as well as the greater probability of thus effectively checking hemorrhage so occa-

sioned, should not be entirely lost sight of. As to the surgical method, I may repeat that, in the majority of cases of interstitial uterine tumors, no active treatment whatever appears to me essential, inasmuch as such growths seldom destroy life, and may become arrested in their development and quiescent in their symptoms at the menopause, or even possibly disappear altogether in the course of time. The latter event is, however, too exceptional to have much influence in determining the expediency of surgical treatment, and more especially that by oöphorectomy, which is unquestionably called for in the case of fast-grown fibroids giving rise to otherwise uncontrollable hemorrhagic or pressure troubles, particularly when occurring in young patients.

With regard to hysterectomy, although exceptional cases may occur in which this procedure is necessitated, the average mortality following its performance is sufficient to forbid its general employment, as an operation of election, in a disease the average mortality of which, when left to nature, is so comparatively insignificant. Moreover, I have shown in my own practice the possibility of removing uterine tumors in cases such as those in which hysterectomy is advocated by the comparatively safer operation of enucleation. While as to myotomy, in view of its too common results I can only repeat that it appears to me a method by which a patient may be effectually removed from a tumor, rather than as an operation by which a tumor can be safely removed from a patient.

I therefore desire again to urge the utility, before resorting to any of these operations, in instances at least of non-incapsulated intense myoma, of giving a fair trial to the alternative medical treatment which I have myself found serviceable in such cases. In many instances of this kind we may thus possibly succeed in arresting the progress of the neoplasm, alleviating its symptoms, and restoring the patient to comparative health and comfort by purely medical means.

The most prominent symptom of fibromata, especially if submucous and occurring before the menopause, being uterine hemorrhage, the arrest of this must be a primary object of

treatment. For this purpose the patient should be kept at perfect rest from the time when the recurrence of the hemorrhage is expected until the menstrual period has completely passed over. In any serious case of hemorrhage thus caused we should at once resort to the free use of either ergotine, or, preferably, of the ordinary liquor ergote (B. P.), both hypodermically and by the mouth. During the past ten years I have employed ergotine this way in nearly every case of this kind treated in my gynecological wards, and I have no hesitation in saying that we may thus generally control any hemorrhage caused by uterine fibro myoma. Moreover, by the continued employment of these hypodermic injections in some instances such a marked diminution in the size of the tumor may be occasioned as to render any further treatment unnecessary.

Among the means by which the congestive hypertrophy of the uterus, always attending the development of fibro-myomas, may be diminished, and the consequent hemorrhage be checked, none are so beneficial as the hot water irrigation. For this the cervical canal must be previously dilated, and the irrigation persistently employed at regular intervals and for a lengthened period on each occasion.

Our second therapeutic aim in such cases should be so as to stimulate the activity of the local absorbents as, if possible, to induce the diminution of the tumor.

Foremost among the remedies available for these purposes are iodide of potassium, the various bromides, and small doses of tincture of iodine, which I suggested many years ago in a paper in the "Dublin Obstetrical Transactions." Chloride of calcium, from which, in the hands of the late Dr. McClintock, I have seen marked benefit in the treatment of uterine tumors, probably acts by inducing a certain amount of calcification, and consequently diminished vitality in the neoplasm. By far the most useful, however, of all these drugs is iodide of potassium, when given in as large doses and for as long a period as it can be safely administered in cases of myomata occurring in patients of otherwise robust constitution.

Lastly, with reference to the benefit deriv-

able in many cases of fibro-myomata from the use of iodated and bromated mineral waters, I may reiterate the opinion, founded on my own experience, which has been borrowed by others, of the effect of the mineral springs of this class in Germany, Switzerland, and France, on patients undergoing "the course," as well as in cases in which I have since then prescribed these waters, viz., that in cases of uterine myomata in which, for any reason, operative interference is not available we may possibly succeed in arresting the development of the disease by sending our patient to a suitable iodated or bromated spa, such as Kreuznach, Wildeg, or Shinznach.

In conclusion, it can hardly be necessary for me to observe that, although I attach so much importance to the constitutional treatment of chronic uterine, tubal, and ovarian maladies which, I believe, is too generally overlooked at the present day, at the same time, as a gynecological practitioner myself, I am by no means insensible of the equal importance of conjoining efficient local treatment with the constitutional remedies indicated in such cases.

EXPLORATORY ABDOMINAL INCISION.*

BY W. SYMINGTON BROWN, M. D.

The frequent performance of laparotomy nowadays may be said to be the result of two antecedents, namely, anesthesia and antiseptics. At all events, if ether and chloroform had not been introduced into surgical practice, and if Sir Joseph Lister had not preached the gospel of absolute cleanliness (for that is substantially what antiseptics amounts to), there is no probability that surgery would have made the rapid progress it has done during the last forty years, and it is still more improbable that laparotomy would have been performed in one case out of a hundred where it is now resorted to.

While I rejoice at the triumphs of modern surgery, and acknowledge that this is only the morning of a new surgical era, I think that a note of warning would not be out of place in regard to the drawbacks attendant on the

*Read before the Gynecological Society of Boston, April 10, 1890.

present wholesale cutting open of women's abdomens, in the shape of the removal of nearly normal ovaries and so-called exploratory incisions.

I think there can be little if any doubt that the cicatrix left after healing is weaker than the original tissues cut through. Like all scars in which muscle has been divided, the union consists of a homogeneous tissue which always contracts, and which has a tendency to form adhesions to the abdominal organs it comes in contact with. So that besides the risk of ventral hernia, there is also danger that some portion of the jejunum or ilium may become obstructed in consequence of morbid adhesions. It is true that in healthy young persons cicatrices have a tendency after a while to relax and regain a portion of the individuality originally present in the different tissues cut; that is, skin becomes more like skin, and muscle like muscle; but I doubt if a deep scar ever entirely recovers its original powers of elasticity and contractility.

The inference I feel inclined to draw from these facts is, that we should never perform exploratory incisions except when warranted by a clearly defined danger to the patient's life.

On the other hand, it will not do to be too timid and excuse our timidity on the plea that exploratory incisions have of late years been too frequently performed. In one sense this is a matter with which we have practically nothing to do. If another surgeon performs an exploratory incision unwarrantably, that is no reason why we should shrink from doing it in a case which requires it. Mere routine here, as elsewhere, is a nuisance which often prevents faint-hearted practitioners from doing their duty. In other words, every case should be treated on its own merits.

The following (personal) case is offered as an illustration of the preceding argument:

A regular physician in Boston asked me to see his wife on the 9th of last August. She had been sick for about three weeks, most of the time confined to bed. I had treated her for a slight uterine trouble some seven years ago. On the present occasion I ascertained that she had been flowing intermittently for fully three weeks, with nausea, occasional vomiting, and latterly acute cystitis. I pre-

scribed for the cystitis, and next day, along with the late Dr. Warner, made as thorough an examination as the extreme sensitiveness of the pelvic region permitted. We found the uterus retroflexed and a boggy tumor about the size of an infant's head occupied the left side of the pelvic cavity, partly above the brim; but we failed to determine its nature. After the cystitis had subsided we held a second consultation—August 29th—when we etherized the patient and attempted to replace the womb, but did not arrive at any definite conclusion as to the tumor.

On the 2d of September Dr. F. W. Johnson, of Newbury Street, Boston, and Dr. Warner met me in consultation, and a third examination (also under ether) was made. Dr. Warner suspected extra-uterine pregnancy. The uterus was empty though somewhat enlarged, the sound passing four inches. Neither Dr. Johnson nor I could see any clear evidence of pregnancy. On the 5th of September Dr. H. O. Marcy, of Boston, was called to see the case. The patient was suffering from septicemia, and was rapidly running down. On that account I suggested to Dr. Marcy that he should come prepared to make an exploratory incision, and after a very thorough examination he opened the abdomen, and we found a very large extra-peritoneal hemothecoele, which could be safely emptied from the vagina, and this was so emptied one week later. More than a quart of decomposing blood clots was removed. The sac was thoroughly washed out twice or thrice a day with hot water and a weak mercurial solution by the patient's husband, and she made a rapid recovery.

The fact is, her life was saved by the exploratory incision. Three experienced gynecologists failed to make a correct diagnosis. They were finally disposed to conclude that it was a hemothecoele, but whether inside or outside the peritoneal cavity none of them could say. The abdominal incision decided that question, and allowed us to take steps which saved the woman's life. In similar cases, which I admit are not very numerous, I would have no hesitation in urging recourse to an exploratory incision. When the explanation was made to the patient she readily consented.

A few days later I had the good fortune to meet Dr. Thomas Addis Emmet at the annual meeting of the American Gynecological Society in Boston. In a private conversation I told him about this case, and he kindly related to me one of his own. A lady from the South applied to him for advice in regard to a large abdominal tumor. Certain circumstances connected with her surroundings led him to suspect that the growth might be an enlarged spleen, although the probabilities pointed to an ovarian tumor. With his usual extreme candor Dr. Emmet told the patient that he was not sure whether it was ovarian or not, but that if she would allow him to make an exploratory incision he would be able to decide, and would probably remove the incumbrance. She refused, went home, and in a few months died. The autopsy showed that it was a simple ovarian tumor, without adhesions, which, to use the doctor's own words, "a smart boy, twelve years old, might have successfully removed."

STONEHAM, MASS.

A CASE OF RUPTURE OF THE BLADDER.

BY G. W. BOWEN, M. D.

Jas. MacGreggor, sailor, native of Scotland, aged thirty-seven years, was committed to the Toledo work-house, May 24, 1887, charged with disturbance and drunkenness. I was summoned to see him on the morning of May 25th; found him sitting upon his cot in a half-doubled position, his hands pressing upon his abdomen. He claimed that he could not lie down or stand up. His pulse was full and regular, tongue coated; could not tell when his bowels had last moved. Prescribed hydrg. submurias and pul. rhei, $\bar{a}\bar{a}$ 10 grains. Saw him next on the 26th; he had had several operations from the cathartic and had voided urine at each operation; had taken some food and said he felt much better, but still had pain in the abdomen. Prescribed quinia with opiates.

27th: Condition unchanged; had passed urine twice during the night.

28th: Lying on his back; pulse feeble and irregular; abdomen distended, but no pain on pressure. At this visit he informed me that

after he left the saloon where he had been drinking beer two men followed him down to the lumber-yard near the dock, where he was knocked down. One man kicked him in the abdomen. I suspected at this visit that he was dying from internal hemorrhage. He died on the morning of the 29th, nearly five days after the occurrence of the alleged outrage. Twelve hours after death I made a *post-mortem* examination, assisted by Dr. J. T. Woods. There was no abrasion or other mark of external injury of the abdomen. Upon opening the abdomen the peritoneal cavity contained something over one gallon of urine. The bladder presented a shrunken appearance, and near the base posteriorly was found a rupture one and one half inches in length. The intestines and peritoneum presented a healthy appearance, with the exception of a spot of about one inch in diameter on the floor of the pelvis, just beneath the laceration. This was dark and somewhat soft.

In speaking of injuries to this organ, Prof. Gross says "that rupture of the bladder usually reveals itself by well-marked symptoms, both general and local."

This, I think, is true, and should I ever see another case I think I could make a diagnosis. But I think the injury is not of frequent occurrence, as the above is the only one I have met with in nearly thirty years of active professional life.

TOLEDO, OHIO.

Abstracts and Selections.

THE FATAL AFTER-EFFECTS OF CHLOROFORM.—The occasional fatal effect of chloroform on the operating-table is only too well known, though we think not sufficiently heeded in some countries. But, if the patient survives the operation only to die afterward in the course of a few hours or several days, the anesthetic employed almost invariably escapes blame. Some other agency, such as shock, peritonitis, or the like, is usually made the scape-goat. Of late, however, the profession has been growing awake to the fact that every death after surgical operations is not due to hemorrhage, peritonitis, or septicemia, the three *bêtes noires* of the surgeon. More careful observations and searching autopsies have shown that in many cases the fatal

termination was due to some disease of the viscera. This may have existed prior to the operation, which merely had the effect of making an unhealthy organ worse, or, what is not at all unlikely in the light of recent observations, the disease was invoked during the operation, or, in other words, by the anesthetic employed.

As early as 1850, Casper drew attention to what he termed chronic chloroform intoxication after surgical operations. Shortly after this Langenbeck had a death seventeen hours after a scapula extirpation, which he attributed solely to the narcosis. Berend subsequently published several cases of death occurring up to within sixty hours after operations, which careful autopsies failed to show any cause for, and which he properly attributed to the narcosis. Since then Ungar and Strassmann have shown by a number of experiments with chloroform inhalation in animals that a fatty degeneration of the internal organs—viz., the heart and liver—takes place without any palpable blood changes, and that this fatty degeneration may be the chief or sole factor of a fatal termination. Following in the same line of research, Oster-tag has quite recently made a number of experiments on animals, and these he has published *in extenso* in Virchow's Archiv. Rabbits, guinea-pigs, rats, pigeons, cats, and dogs were used for the experiments. Chloroform mixed with air was administered until complete narcosis was produced; the anesthetic was then withdrawn and not applied again until it was observed that its effects were passing off. It was found that the effects of chloroform varied with the different kinds of animals and with different individuals of the same kind. The time during which the animals were kept in a state of narcosis varied from half an hour to four hours and a half. The same animal was chloroformed daily for several days in succession. As a result of his observations the author makes the following deductions: (1) After long-continued chloroform inhalations there may be set up in various animals a fatty degeneration of the internal organs—viz., fatty infiltration of the liver and fatty metamorphosis of the heart, of the muscles of the skeleton, of the kidneys, and of the stomach. (2) The fatty metamorphosis of the above-named organs is due to the effect upon the blood (destruction of the red-blood corpuscles) and upon the tissue cells themselves. (3) Certain individuals manifest a great susceptibility to the injurious effects of chloroform, and succumb after a shorter or longer administration of it. (4) The fatal after-effects of chloroform show themselves in a paralysis of the heart, which is at times brought about by only slight anatomical changes of the myocar-

dium and a gradual accumulation of carbonic-acid gas in the blood.

Although, so far as we know, ether is used much more extensively in this country than chloroform, the foregoing experiments with the latter agent sound a warning note against the indiscriminate use of either anesthetic. For, although it is generally believed that ether is not so likely to paralyze the heart as chloroform, its long-continued administration may be just as injurious in its after-effects, especially upon the kidneys. The practical questions that arise are, Do not surgeons at the present time display too much conservatism in arresting hemorrhage? is not too much valuable time consumed in saving a few ounces of blood to the patient while his whole system is being poisoned by the prolonged administration of the anesthetic? It is to be feared that we have been lulled into an unsafe slowness in operating by the sense of certainty that the patient's sensations are abolished, and that we are likely to forget that our tardiness may be the means of setting up a fatal or chronic disease of the vital organs.—*N. Y. Med. Journal.*

NERVOUS AFFECTIONS IN THE COURSE OF WHOOPING-COUGH.—Dr. Troitski gives in a Russian journal a short summary of three cases of whooping-cough accompanied by mental disturbances, difficulty in or loss of speech, and loss of power, or even paralysis, of certain groups of muscles. The first case was that of a little girl two years old, who, during an attack of whooping-cough complicated by bronchitis, was seized after some paroxysms by distortion of the eyes, blindness, and contraction of the arm flexors, quiet delirium and widely distended pupils, Cheyne-Stokes breathing, diminution of the patellar reflex and of the sense of touch and of pain. At another time she became unconscious, and there were clonic contractions of the facial muscles, and staring eyes, the pupils being dilated and not insensitive to sight. Soon afterward a general eclamptic condition with Cheyne-Stokes phenomenon came on, the attack lasting for an hour and a half, and giving place to stupor which lasted twelve hours, and during which the child could see, but did not understand, and called things and people by wrong names. These attacks gradually diminished, and in two months she was convalescent. The second case was that of a boy three years and a half old, who had severe headache and difficulty in thinking and speaking during the fourth and fifth weeks of the whooping-cough, which was complicated by pneumonia. His speech returned after three months, the whooping-cough lasting eight weeks. The hearing was much

impaired. The third case was that of a little girl of seven months old, who in the fifth week of her illness had two eclamptic attacks, and in the sixth week impairment of power in the right arm, the deltoid being especially affected. The arm became quite paralyzed after a fit of coughing. Dr. Troitski saw the child again after three months; the paralysis of the arm had disappeared without any treatment, the attacks of coughing having ceased when the arm became powerless. He considers that these conditions were due to disturbance of the circulation, and through that to morbid changes in some part of the brain.—*London Lancet*.

TRANSPLANTATION OF THE THYROID.—That the thyroid body exercises some powerful and essential function can not be for an instant doubted in view of the apathetic mental state, ending in almost complete imbecility, that follows its removal in man or animals, marked by tremors, convulsions, subnormal temperature, and a general constitutional degeneracy similar to that of myxedema and cretinism. The idea has suggested itself to certain physiologists that the thyroid when absent in man might appropriately be replaced by thyroids from healthy animals. Attention is called to certain results that have been thus obtained, in a paper by Dr. L. H. Petit, in the *Union Médicale* for March 15, 1890. Horsley and Eisberg have experimented with this zoöplastic grafting, which in Horsley's hands prevented the appearance of myxedema after thyroidectomy. Following out this hint, Lannelongue came to believe in the feasibility of ingrafting thyroids in cases of congenital absence of the gland, especially when, in consequence of this imperfection, there was arrest of physical or mental development. Symptoms of myxedema and the condition of cretinism as described by Bourneville were present in a fourteen-year-old girl at the Hôpital Rousseau. Though an operation was decided upon, myxedematous tumors about the neck interfered with placing the new thyroid in its usual locality. A spot in the thorax, above the right breast, was chosen as an appropriate habitat for the thyroid of a yearling sheep. This was slipped in among the tissues, which, after the first incision, were separated rather than cut by means of a blunt spatula, to insure bloodlessness as far as possible. The sheep's thyroid was first slightly denuded, the capsule being snipped off with scissors, and the body plunged quickly into the cavity to the depth of three centimeters. Several sutures closed the opening. The operation was aseptic, but not antiseptic. There was no rise of temperature. The dressings were

changed in a week, and the stitches taken out. Union was perfect without any sign of suppuration.

The questions arise as to whether the transplanted body remains a veritable thyroid, carrying on its normal function, and, if it does, as to whether it can grow or eventually become absorbed. Time alone can settle these questions. The gland's superficial situation allows of careful observation of all possible changes. Chauveau thinks the grafted thyroid can scarcely hold its own, and cites as a proof of his idea the ultimate absorption of the transplanted testicles of sheep, no matter how deeply imbedded in connective tissue, the vascular communication between these bodies and the surrounding parts being too slight to maintain independent life. And, aside from this, it is the tendency always of transplanted tissue to become absorbed. However, it is impossible to predict what may happen to a thyroid, which differs greatly from a testicle or a spleen. In Eisberg's case the transplanted thyroid, when anatomically examined ultimately, was found to have performed its function. Should this method of supplying mental and physical deficiencies due to absent thyroids eventually prevail, it will be, says Chauveau, due entirely to the surgical skill that Lannelongue joins to logical judgment.—*New York Medical Journal*.

PULMONARY PHTHISIS AND PULMONARY TUBERCULOSIS.—Neelsen emphasizes the fact that pulmonary phthisis and pulmonary tuberculosis are not identical, and says that in the study of the tubercle bacillus many important processes occurring in the lungs have been overlooked. The inhalation of the tubercle bacilli, especially when mixed with dust, by which their specific action is intensified, does not of itself produce in animals what we call pulmonary phthisis but an infundibular pneumonia (Aufrecht), in whose neighborhood miliary tubercles establish themselves, grow, and break down, forming throughout the lungs foci the size of a pea or larger. This picture does not correspond with the ordinary one of phthisis, in which two other things are necessary, the formation of cavities and attacks of pulmonary inflammation.

In the majority of cases the cavities are of bronchiectatic origin. The bronchi, narrowed or obliterated from inflammatory processes in the lymph vessels of their walls, become distended behind the obstruction by the retained secretion. Their walls are destroyed by the tubercle bacilli or other pus-producing bacteria, till either the obstruction is overcome or an opening is made into neighboring bronchi. The

pneumonic processes which exert so large an influence on the course of phthisis are not excited by the tubercle bacillus, but are due to other organisms.

The same distinction is to be made in both etiology and treatment. It is impossible to speak of a special predisposition to tuberculosis, but only one for an infundibular pneumonia (staub-infundibular pneumonie) arising from the inhalation of dust, nor is it possible to hope for the cure of phthisis by any method affecting only the tubercle bacilli. A specific may be found for tubercular joint lesions, perhaps also for miliary tuberculosis, but never for phthisis, as that is not the result of the tubercle bacilli alone.

As a corollary to this paper Lemhardi and Neelsen report a case of phthisis pulmonalis in which no evidence of tubercle was to be found either during life or at the autopsy.—*Boston Medical and Surgical Journal*.

TWO FATAL CASES OF EPIDEMIC INFLUENZA IN INFANTS.—The following cases are of interest, as in general young infants were exempt from the recent epidemic, and, further, they occurred at the time, presented very nearly the same symptoms, and the autopsy in each showed practically nothing pathological.

They were taken sick, together with about thirty others, when *la grippe* was at its height, and were the only cases in which the disease proved fatal:

I. John F., aged six months, previous condition healthy, gaining in weight, was taken sick with slight cough, diarrhea, and vomiting. Temperature first day ranged between 99° and 101° F.; second day, 99° and 101°; third day, 103° and 105°; fourth day, 101° and 103.2°. Died on fourth day; temperature at death, 103.2°.

II. Lena F., aged fifteen months, previous condition fair, gaining in weight slowly, was taken sick with diarrhea, vomiting, and slight cough. Temperature, first day, 102° to 103° F.; second day, 103° to 104°; third day, 101° to 101.6°. Died on the third day; temperature at death, 101.6°.

As the other symptoms in each were almost identical, I will give them together.

The cough was not severe; physical examination showed a mild bronchitis.

The gastro-intestinal symptoms were of the severity of an ordinary dyspeptic catarrh. The prostration, however, was entirely out of proportion to the other symptoms, being extreme in each case in fact; they were in a semi-comatose condition after the first twenty-four hours, presenting the appearance of having been suddenly struck down by a virulent poi-

son, or of a child in the last stages of cholera infantum. The pulse was about 150 during the first twenty-four hours; later it could not be counted at the wrist.

The eyes were sunken and rolled up, or open and staring; did not notice anything.

The pallor was extreme; the face drawn and pinched. The pupils were even, and responded slowly to light. Patellar reflex and sensation were normal. No convulsions or twitchings at any time. Considerable food and whisky were taken—were swallowed when put in the mouth. Brandy was given hypodermically, but the effect was very transient. One child lived three, the other four days after the development of the first symptoms.

They were under the care of a trained nurse night and day, so drugging was out of the question.

The organs in both were healthy, with the exception of slight hypostatic congestion of the lungs in one.—*N. Y. Med. Journal*.

THE THERAPEUTIC EFFECTS OF GRINDELIA ROBUSTA.—Professor Bufalini publishes in the *Internationale Klinische Rundschau* the results he has obtained from the administration of *grindelia robusta* in his clinic at Siena. He states that the drug has been used for some time past in America as an expectorant and in asthma, and preparations of the plant are incorporated in the Pharmacopœia of the United States. A complete analysis of *grindelia robusta* has never been published, yet Radenaker has extracted a terpene, which in odor resembles turpentine; a resin, which he calls "grindelin," and some substance with an alkaline reaction, which has not been fully examined. Ayres and Gibbons were the first to make any practical use of the anti-asthmatic qualities of *grindelia robusta* in the treatment of the asthma of bronchial catarrh, when complicated with dyspnea, and of vesical catarrh. Later on Bartholow and Buffington observed that *grindelia* was also useful in heart disease. In their experiments they succeeded in obtaining a diminution of the contractions of the heart, a rise of the blood pressure, and increased frequency of respiration. After the publication of these experiments, Dr. Dobroklonsky studied in the clinic of Professor Botkin the therapeutic virtues of *grindelia* in affections of the circulation of the blood, and he, too, found that the extract has very marked influence on the frequency of the systole. According to this author the best success is obtained in the treatment of heart disease by combining *grindelia* with *adonis vernalis*. Professor Bufalini has in the last two years repeatedly administered *grindelia*, and has in many cases of irreg-

ular, intermittent pulse obtained remarkable results with it. He therefore strongly recommends this drug in all cardiac affections in which a regulating effect on the heart's action and the restoration of an arhythmic pulse are indicated. The dose of the extract is from seven to fifteen grains.—*London Lancet*.

NOTE ON THE ALA CINEREA.—One of the most striking features of the human medulla oblongata—one which has been heretofore characteristic of this division of the cerebral isthmus and distinguished it from almost every other animal—is the pigmentation of the cells of the ala cinerea. This pigmentation causes this muscular mass to be thrown by its gray color into a relief from the general white appearance of the floor of the fourth ventricle. Hence no cerebral feature has been more accurately defined as a landmark in this region of the human brain than this columnar gray mass.

It has heretofore been supposed that this nuclear accumulation presented a gray color only in the human species. It has been recorded in the *Ateles melalochia*, and I have seen it in the seal. To these exceptions I can now add that of a dog (the field spaniel). In the animal of this species examined, the *ala cinerea* were as deeply gray as in most, and more so than in some, adult human brains. The difference, however, was in the shape of the column. While in man this outline is pyramidal, with sharply defined angles, in this dog it presented the shape of a truncated cone whose detached vertex was replaced by a hemisphere, and whose elements formed an angle of at least 85° with its base, so that it was almost cylindrical in shape.—*N. Y. Med. Journal*.

THE DANGERS OF HYPNOTISM.—At Nuremberg a case of some public interest has recently been tried in the police court. A commercial traveler while in a restaurant told the waitress to look steadily at the white of his eye, and hypnotized her. On a second occasion he repeated the experiment, but this time the sleep was so profound that a medical man had to be called, who had the utmost difficulty in rousing the girl. The commercial traveler was accordingly summoned to appear before the magistrates, and the severe sentence of eight days' imprisonment was passed upon him, which will probably be efficient in checking similar performances in that region. In France the practice of hypnotizing people for amusement seems to be very common, and unpleasant consequences are often reported. At a supper party in Paris, recently, one of the company hypnotized a girl and was unable to rouse her. She was consequently taken to the house of a medical

man, and after a time she recovered consciousness. The whole party were taken into custody by the police, and were not released until next day. Even when hypnotism has been practiced by competent medical men for remedial purposes, unpleasant accidents and ulterior consequences have again and again occurred, so much so that recently an order has been issued by the French Government prohibiting surgeons in the army and navy from practicing it. It ought to be distinctly understood both by the profession and the public that hypnotism is not devoid of danger at the time, and not infrequently has permanently impaired the moral and emotional control of patients. A medical man is bound, before recommending hypnotism for a patient, to weigh the question as carefully as he would that of the advisability of administering an anesthetic.—*Lancet*.

HEART FAILURE AND EXTREME RESTLESSNESS FOLLOWING SURGICAL OPERATIONS.—Dr. W. Duncan McKim, of New York, read a paper upon "The Present Status of Laparo-Elytrotomy," with report of a successful case, before the New York Clinical Society, November 25, 1889. Dr. McKim's report is as follows:

"On the twenty-sixth day after the operation the constantly increasing restlessness not being controlled by morphine, bromides, camphor, chloral, etc., the heart's action being decidedly depressed by them, a cylinder of Walton's oxygen and nitrogen gas was obtained and the gas constantly inhaled. The relief seemed very marked, the delirium abated, the pulse grew less frequent and stronger, and the rate of respiration fell. The gas was now used as constantly as possible for about ten days, sixteen or seventeen cylinders having been used. In view of the frequent discussions as to the therapeutic value of oxygen, this point in the history of this agent is of considerable interest. But time will permit my saying merely that, of the many remedies used to relieve restlessness and strengthen the action of the heart, none seemed at all effective except the oxygen. When the supply gave out the patient grew rapidly worse, and when once deprived of the gas for eighteen hours she sank so low that I despaired of her recovery. The beneficial effect was so apparent, not only to myself but to Dr. Kenefick and the nurses in attendance, that the trustees of the hospital resolved to have it employed as long as seemed needful."—*N. Y. Med. Journal*.

THE TREATMENT OF GOITRE BY INJECTION OF IODOFORM.—Prof. Mosevig, of Vienna, has treated the soft varieties of goitre during the past ten years by injections of iodoform. His

results have been excellent, and the patients have not been compelled to abstain from their usual avocations during the entire period of treatment. Under antiseptic precautions the following solution is injected with a Pravaz syringe :

Iodoform.....1.0
 Etheris.....5.0
 Ol. olivæ.....9.0

or

Iodoform.....1.0
 Etheris }7.0
 Ol. olivæ }

This solution should be protected from the light and only used so long as it is of a light yellowish color.

The canula is inserted to a depth of two to three centimeters, and then the fluid is slowly injected. To determine whether the needle has actually penetrated the tissue of the goitre, the patient is told to swallow, when, if the needle is imbedded in the gland, it will follow the movements of the goitre. The smallest quantity injected is one gram, and the author has injected as much as four grams in two places at one sitting. The procedure is repeated at intervals of three to eight days. According to the size of the tumor five to ten injections are required to effect a cure. The reaction following the operation was always slight, and consisted of attacks of pain and coughing, which, however, ceased within an hour.—*Weiner Medicinische Presse: International Journal of Surgery.*

TRE CAUSE OF PALLOR.—Dr. Oppenheimer has published some careful observations on the blood of 109 pale female subjects (servant girls), conducted by means of Zeiss and Thomas' hemocytometer and Grower's hemoglobinometer. He considers the lowest number of corpuscles per cubic millimeter in a normal state of health as four million, and the lowest amount of hemoglobin in health 90 per cent. He also agrees with Gräber's dictum: "*Number of corpuscles and hemoglobin both diminished equals acute and chronic anemia. Number of corpuscles diminished, hemoglobin relatively increased, equals primary chlorosis or pernicious anemia. Number normal, hemoglobin diminished, equals chlorosis.*" In severe cases of chlorosis, with tendency to faintness, headache, heart symptoms, and edema without albuminuria, the hemoglobin varied from 30 to 50 per cent. In fifty-five of the cases the condition of the blood was normal. These patients were found to be suffering from phthisis, cardiac disease (compensated), gastric ulcer, and various affections of stomach, intestines or genital organs. Phthisis of itself—that

is to say, before hemorrhage or diarrhea or profuse expectoration had come on—appeared to have no effect on the blood. An interesting result was obtained in connection with gastric ulcer. In simple ulcer the blood was normal, except when there had just been hematemesis, but in carcinoma of the stomach both the number of the corpuscles and the hemoglobin were subnormal anemia. Pale girls sometimes take iron for a long time without any visible improvement. Dr. Oppenheimer finds that such patients are not anemic, but chlorotic from some uterine or other affection, so that when the blood is found to be normal it is advisable to make a vaginal examination. The pallor of patients with normal blood appears to be due to the insufficient filling of the cutaneous capillaries. From the observations of Dastre and Morat there would seem to be an antagonism between the blood-vessels of the skin and those of the abdomen, so that if one of these systems becomes dilated, the other, by an automatic reflex action, invariably becomes contracted. Because of the fact that irritation of the depressor nerve of the heart induces dilatation of the abdominal vessels and contraction of the cutaneous vessels, Dr. Oppenheimer believes that the pallor of phthisis, cardiac diseases and kidney mischief is due to reflex action. In these affections the heart has extra work to do, and this affects, by means of the depressor nerve, the vaso-motor center, causing a diminution of the cutaneous flow, and consequently a dilatation of the abdominal vessels. The pallor observed in most inflammatory affections of the hypogastric viscera may probably be explained also by the reflex action of the hyperemic abdominal vessels upon the caliber of the cutaneous vessels.—*London Lancet.*

HEART-FAILURE CELLS.—In a recent article in the *Deutsches Archiv für klin. Med.* (October, 1889), Professor Hoffmann again calls attention from a clinical standpoint to the significance of certain cells, to which he has given the above name, occurring in the sputum in cases of brown induration of the lung in mitral disease, myocarditis, and pericarditis. These cells are distinguished by their size, more or less oval form, and beautiful balloon-shaped nucleus, but more especially by containing yellow and yellowish-brown to brownish-red and black pigment. It is not easy to confuse them with other cells. They resemble in all points the desquamated epithelium of the alveoli, and are characterized by their pigment shading yellow to brown. Hoffmann regards the heart-failure cells as desquamated alveolar epithelium, and considers their presence in the expectoration as a sign that brown induration

of the lung is present. Prof. Sommerhardt refers their origin to proliferation of alveolar epithelial cells, which swell up and absorb the red blood corpuscles extravasated into the lumen of the alveoli, becoming ultimately pigmented by the alteration of the corpuscular coloring matter. Hoffmann maintains, however, that in the lung in heart-failure these cells are derived from those under the epithelial covering, and partly by diapedesis, partly by capillary hemorrhages into the lung tissue, obtaining their pigment. Whatever view may be taken of the derivation of their pigment, their significance as a sign of heart-failure does not seem to be questioned.—*Berlin. klin. Wochensh.*

IODINE AS A REMEDY FOR VOMITING.—M. Darthier (*L'Union Médicale*, December 10) bears testimony to the value of tincture of iodine administered internally for the relief of vomiting, a remedy recommended by the late Prof. Lasegue in the vomiting of pregnancy. The author had observed its use in nineteen cases, eleven of which were tubercular subjects, and found that it is of more value in the vomiting of early phthisis than in that of the later stages of this disease. At the same time he gives instances of advanced cases with obstinate vomiting where the symptom was largely controlled by the drug. Among other cases he gives one of bronchial dilatation (subsequently fatal from acute tuberculosis) in a female who for three weeks had regularly vomited after every meal. From the date of commencement of the use of the drug she ceased to vomit, and after a week's treatment, which was not productive of any signs of iodism, was completely cured of the symptom. Apart from phthisical vomiting, M. Darthier finds it useful in alcoholic gastritis, in ulcer of the stomach, and in the vomiting of pregnancy and of chlorosis, instances of which are recorded. He says that the majority of the patients take the iodine with pleasure; it often produces an agreeable sense of warmth in the stomach, lasting from five to twenty minutes. The dose is ten drops dissolved in 125 grams of water, taken in three portions immediately after meals. In a certain number of cases symptoms of iodism are produced, chiefly coryza; but a good many patients do not experience any such inconvenience from it.—*The Lancet*.

PREVENTION OF SECONDARY CATARACT.—Dr. Wicherkiewicz, of Posen, in discussing this subject, observes that the complete removal of the capsule is still a desideratum in the operation of extraction, notwithstanding that various operators have urged the advisability of

taking away a triangular, circular, or square portion of the central region of the anterior capsule which is thicker than the rest. With this object in view he has constructed two instruments. One of these resembles a pair of iridectomy forceps with five projecting teeth, so arranged that when introduced into the anterior chamber closed they do not injure the cornea or iris, and yet when opened in contact with the anterior capsule they are capable of lacerating it and of seizing and removing nearly the whole of it. If, the capsule being normal, it can not be seized without exercising undue pressure, the capsule should be divided at the lower part of the dilated iris, and the forceps should then be used. The second instrument which he uses, when an iridectomy is made in the performance of extraction, combines the advantages of a cystotome and of the forceps just described, the points having two sharp prominent teeth, while the blades are similarly constructed with five teeth adapted for seizing the capsule.—*Recueil d'Ophthalmologie*.

PROGNOSTIC SIGNIFICANCE OF MODERATE CARDIAC HYPERTROPHY AND DILATATION.—Dr. Chas. Sheard says:

1. A diseased valve may be restored to functional activity and leave no ill effects.

2. The diseases of the heart most liable to cause sudden death are aortic regurgitation and fatty disease.

3. That in aortic stenosis the patient has generally the longest lease of life given with any valvular disease, and may live for years after moderate hypertrophy exists.

4. That aortic obstruction and aortic regurgitation, when associated, is the most grave of all cardiac lesions.

5. Lesions of the mitral valve, both obstructive and regurgitant, are slow in causing death.

6. Simple irregularities in the heart's beat may be classed with functional disorders as not showing liability to organic disease.—*Canadian Practitioner*.

STERILIZATION OF SURGICAL INSTRUMENTS. In a paper read before the Brooklyn Medical Society, Dr. H. B. Delatour concludes that in heat we have a most efficient sterilizer; that it can be easily obtained, either in a moist or dry state; that if care be taken not to exceed 150° C., but to go above 130° C., no harm will come to the instruments, and they will be absolutely sterile; and that all dressings, gowns, towels, etc., can be treated satisfactorily by heat.

Dressings prepared by heat alone (aseptic dressings) are not sufficient for cases that are

already septic. In these cases a chemical antiseptic should be added. Dressings sterilized by heat should be prepared just at the time they are to be used, and should be applied directly from the sterilizer.

Aseptic instruments and dressings are useless without aseptic hands, and to have the hands aseptic they must be exposed to the chemical solution for a longer time than is ordinarily given. Simply dipping the hands in the solution is but to delude one's self. With nail-brush scrub the hands in hot 1-1000 bichloride for five minutes, after having previously washed them with soap and warm water, and see that no dirt remains beneath the nails.—*Brooklyn Medical Journal*.

ELECTRICITY VS. PRIMARY LAPAROTOMY IN ECTOPIC GESTATION.—Dr. Egbert H. Grandin, of New York, concludes as follows on this subject:

"From a conservative standpoint, and with due regard to the present and the future well-being of our patients, the time is as yet hardly ripe for primary laparotomy in ectopic gestation, except in those instances where electricity fails, and except there be symptoms of rupture of the sac. When speaking of electricity, the constant current is intended, and not the interrupted galvanic or the faradic currents. If, at any time thereafter, the non-absorbed sac gives evidence of dangerous action, secondary laparotomy may always be resorted to, and with no greater, if with as great, risk as that which may accompany primary laparotomy. After the third month, when ossification has advanced to a considerable degree, primary laparotomy should be the choice, chiefly for the reason that the chances of absorption are lessened by the presence of bone."—*Times and Register*.

THE TREATMENT OF PHTHISIS BY CARBONIC ACID.—It is said that lime-burners enjoy a certain degree of immunity from phthisis, not because they take in more carbonic acid, but because its diffusion when expired is impeded. Again, the course of phthisis is often seen to be arrested in pregnancy, and this has been ascribed to the increased amount of CO_2 in the maternal blood. Chronic heart disease, by causing chronic hyperemia of the lungs, also affords a kind of immunity against phthisis; lastly, in emphysema there is also permanent dyspnea in more or less degree, and the blood is overcharged with CO_2 . Acting on these ideas, Dr. Hugo Weber (St. Johann-Saarbrücken) proposes to administer CO_2 by the stomach, in the form of effervescent powders. Ten cases are reported (*Berliner klin. Wochen-*

schrift, No. 35, 1889), in which decided improvement was noted after this treatment, which certainly merits further trial, especially as it can be carried out at patients' own homes. According to Ebstein's theory of diabetes, the increased proneness to phthisis which that disease entails is due to the defective development of CO_2 , this being not only the final product of tissue oxidation, but a body which exerts a regulatory restraining influence on the destruction of glycogen and albuminoids. Bergeon, Dujardin-Beaumetz, and others have used in phthisis gaseous injections *per rectum* of hydrofluoric acid, copiously diluted with CO_2 , and the good results they met with are claimed by Dr. H. Weber as due to the diluent. *The British Medical Journal*.

MORBID CHANGES IN DIABETES.—Dr. P. Ferraro, who has made several researches on the subject of the changes produced in the different organs of the body by diabetes, has recently published the results of similar investigations in a fresh case, the eighth of the series. The arteries were affected with chronic endarteritis; in the lungs there were morbid changes not due to bacilli; in the stomach and intestines the mucous membrane was atrophied; the pancreas was transformed into a firm, compact mass of fibrous or cicatricial character; in the parenchyma of the liver and the spleen pulp there were also signs of atrophy. Here, therefore, as in the other cases examined, the digestive organs were most of them affected to a greater or less extent, while the nervous system was not apparently the subject of any morbid changes. Dr. Ferraro considers the exhaustive study of the morbid histological changes in diabetes very important, and believes that we shall not arrive at any definite conclusion as to the etiology of this disease until our knowledge of the conditions under which sugar is formed and distributed in the body in a state of health is very much further advanced than it is at present.—*Lancet*.

A SIMPLE INHALER.—Dr. Ernest E. Madrox gives the following useful suggestion for making a simple inhaler, in the *Practitioner*, May, 1889. In it such remedies as compounded tincture of benzoin, menthol, and oil of eucalyptus may be used:

"Coil a piece of paper into the shape of a cigarette, and fix it with gum. Then insert into one end a small uncompressed piece of absorbent cotton-wool, upon which a drop or two of the desired medicament has been poured. Air is now drawn through the tube by the patient, who holds the other end between his lips. This plan is by many patients, especially

by men, preferred to the use of any form of respirator, or to inhalations mingled with steam. These last, moreover, have a relaxing effect in some atonic conditions of the throat."

Of a number of remedies, including menthol, inhaled in this way by a patient suffering from pulmonary phthisis, he found that oil of peppermint gave most satisfaction. A small tube of vulcanite flattened like a cigarette-holder at one end, with a raised flange or border to be held within the lips, would doubtless, he says, answer still better; but an inhaler, which when needed can be made on the spot, has advantages of its own.—*Canada Medical Record*.

DIAGNOSIS OF TUBERCULAR TUMORS OF THE PONS.—Dr. J. Magee Finny, in reporting a case of tubercular tumor of the pons, in the Dublin Journal of Medical Science, summarizes the symptoms as follows, and thinks that to a large extent they may be taken as typical of tumor of pons: Incomplete paralysis of motion and sensation of the right arm and leg, with a loss of muscular sense; paralysis of the left side of the face (alternate or crossed paralysis); conjugated lateral deviation of the eyes to the right side, with paralysis of the left sixth nerve, and associated paralysis of the right third nerve supplying the internal rectus; slight optic neuritis of the left eye; unsteadiness of gait and weakness of the right leg, and a tendency to totter backward; paralysis of expulsive power in bladder and rectum; a fortnight later, bulbar paralysis, involving the tongue, lips, and pharynx was added, and with it a sensory paralysis of the right side of the face; and still later on, double optic neuritis of much intensity, paralysis of respiration, convulsions, and coma.

EXCISION OF THE PATELLA.—In the November number of the *Revue Médica'e de la Suisse Romande*, Dr. E. Kummer, formerly assistant to Professor Kocher, contributes an interesting and successful case of extirpation of the patella. The patient, a woman aged twenty-five years, had suffered for three years from multiple abscesses around the patella. In June, 1889, Dr. Kummer excised this bone because it contained a tubercular deposit. The synovial membrane near it was healthy. In closing the wound the ligamentum patella was united with the fascia lata and the termination of the vastus internus. The leg was fixed upon Volkmann's excision splint, and in three weeks the wound had healed under a first dressing. In the following September this patient was shown at the Société Médicale de Genève. The woman could extend her leg almost to the normal degree;

flexion was somewhat interfered with. This gradually improved. The woman can now walk four or five hours without limping or marked fatigue; she can kneel without pain, and walk up and down stairs like a healthy person. Dr. Kummer claims that resection of the patella may be practised without altering the power of walking or sensibly hindering the movements of the knee-joint.—*London Lancet*.

IODOFORM IN CEREBRO-SPINAL MENINGITIS. In the Tchernigov weekly *Zemsky Vrach*, No. 10, 1889, p. 151, Dr. G. Levitsky, of Vostrovskaja, calls attention to excellent effects in cerebro-spinal meningitis obtained from the internal administration of iodoform, given in the form of two-grain pills three times a day. He reports a striking case, that of a woman suffering with an exceedingly severe form of the disease, in which, after all other means had utterly failed, the administration of the drug was almost immediately followed by a steady improvement. On the third day of the treatment contractures of the right, and on the fifth of the left upper limb disappeared; by the end of the fourth week the patient was practically well. The drug was therefore discontinued. A relapse, however, rapidly followed, but yielded at once to another course of iodoform, a complete and permanent recovery taking place ultimately. In all, one ounce of iodoform was taken in the course of two months. No untoward accessory effects were ever observed.—*Canada Medical Record*.

INHALATION OF IODIDE OF MERCURY IN TUBERCULOSIS OF THE LUNGS.—Drs. Miguel and Rueff, after prolonged observation, have reported favorably on this method of treating phthisis. One part of biniodide of mercury and one part of iodide of potassium are dissolved in one thousand parts of distilled water, and this solution is employed in the form of a spray; at first, only once daily, and later, when the patients have become accustomed to it, twice daily. In cases where the irritation was excessive, the solution was diluted to one half its strength without deteriorating from the germicidal powers. One of the chief conditions of success is to prolong the treatment, and this can be done for a year or more without evil effect to the patient.—*Therapeutic Gazette*.

A BACTERIOLOGICAL INSTITUTE of Preventive Medicine is to be established at the University of Cambridge. One of the principal lines of work will be anti-rabic inoculations.

THE USE OF THE TAMPON IN UTERINE HYPERPLASIA.—Dr. George J. Englemann, of St. Louis, Mo., after speaking of the merits of the dry treatment for uterine hyperplasia, gives the following reasons for employing the tampon:

"The most important feature of the dry treatment is the tampon which I use:

"1. On account of its *medicinal* properties as a carrier of the remedial agent.

"2. Mechanically as a *support* to hold in place the uterus or other of the pelvic viscera, and as a *compressor* for the edematous tissues and the dilated capillaries.

"3. As a *stimulant* or *alterative* to the tissue.

"4. To *splint* and steady the parts, to *give rest*.

"5. To *cleanse* and render them aseptic by absorbing the discharge, keeping the vaginal walls dry and clean.

"6. As a mechanical *protector*, keeping the tissues apart, preventing friction and irritation, as well as exposure to cold."—*Kansas Med. Jour.*

ANTISEPTIC PROPERTY OF COFFEE.—It has been lately shown by Lüderitz, from a series of experiments conducted by him in the Berlin Institute of Hygiene, that coffee as a drink (infusion) possesses very decided antiseptic properties. Several different forms of bacteria were experimented on, and their growth was found in all cases to be interfered with by the addition of a small quantity of coffee infusion to nutrient gelatine. In pure infusion the bacteria were rapidly destroyed. The question as to what constituents exercise the antiseptic action can not yet be answered. The caffeine is certainly only active to a slight degree, the tannic acid to a greater extent; but probably of greatest importance are substances which are formed during roasting. It is interesting to note that a cup of coffee left lying in a room remains almost free from micro-organisms for a week or more.—*Berlin Klin. Week.*

TESTS FOR COLOR VISION.—The subject of the proper means of testing the color vision of railway officials has again been brought before the public by a lecture delivered by Mr. Brudenell Carter before the Society of Arts. Mr. Carter places great reliance on the wool test, and no doubt as a means of recognizing color-blindness it is extremely reliable, but in view of the transcendent importance of the accurate perception of signals by drivers of engines, we hold that additional security would be obtained by insisting on a practical examination in the opening of colored lights at distances vary-

ing from a few yards to a mile or more. No possible harm can accrue from such method of testing, and the fact that it is in use on some of the Belgian railways speaks strongly in its favor.—*London Lancet.*

TREATMENT OF ERYSIPELAS.—Dr. Koch treated numerous cases of erysipelas with the following ointment:

Creolin	3i;
Iodoform	3iii;
Lanolin	3i.

This ointment is spread as an even smooth layer over the affected skin and its surroundings, on an area of at least two to three inches to the outside of the inflamed parts. The whole is covered by a piece of mackintosh. Dr. Koch selected creolin in the above prescription because he thought that it was possessed of first-class disinfectant properties, without sharing the dangerous after-effects of carbolic acid. Iodine, which is derived from the decomposition of iodoform, stimulates absorption of inflammatory products. Lanolin has been chosen because it penetrates the skin best of all ointment bases.

THE TREATMENT OF INFLUENZA.—Alison (*Arch. Général*, August, 1889) considers influenza (*grippe*) an epidemic, infectious, and probably contagious disease, characterized by irregular fever, inflammation, and catarrh of the mucous membranes, nervous disturbances, and finally sweating and diarrhea. He urges that the simple hygienic or symptomatic treatment be replaced by the administration of tannic acid in doses of twenty to thirty-five grains in cachets three times a day. In this way he treated twenty-three cases, with recovery or relief. There occurs at once a diminution of the catarrh, the pain, and the nervous disturbances; sleep becomes quieter, and appetite returns. The perspirations and diarrhea are influenced to a less degree. In all cases the remedy was well borne.—*American Medical Journal of Sciences.*

ARISTOL, A SUBSTITUTE FOR IODOFORM.—A new iodine derivative of thymol has been patented and introduced as an iodoform substitute under the name of "aristol." It is said to be dithymol di-iodide, and is made by the addition of a solution of iodine in potassium iodide to a soda solution of thymol. A voluminous, red brown, amorphous precipitate results, containing 45.8 per cent. of iodine. This is insoluble in water and in glycerine, slightly soluble in alcohol, and easily in ether and fixed oils. Aristol is said not to be poison-

ous, as it is not absorbed by the system. In the treatment of psoriasis it is claimed to act as favorably as chrysarobin, while it possesses the advantage of not causing the same intense coloration of the skin, or producing symptoms of conjunctivitis. It has also been used for lupus, while its lightness renders it valuable as a dusting powder for wounds and burns.

ICHTHYOL IN CHRONIC BRIGHT'S DISEASE.—Blittersdorf and Lorenz having reported cases of nephritis which appeared to be benefited by the internal use of ichthyol, Professor Koshlakoff, of St. Petersburg, arranged to carry out a systematic examination of the effects of ichthyol on the urine and general condition of twelve patients suffering from chronic Bright's disease. The amount of albumen in the urine was regularly estimated both before the ichthyol was commenced and during the time it was being taken by means of Esbach's albuminometer. The results obtained showed that ichthyol was practically useless as a remedy in chronic nephritis, only one case out of the twelve appearing to be benefited by it, and several of the patients finding the drug so disagreeable that it had to be stopped.—*London Lancet*.

STROPHANTHUS IN INFANTILE DISEASES.—M. Moncorvo has treated infantile diseases with strophanthus, and comes to the following conclusions: As a diuretic and for combating cardiac disturbance, strophanthus is invaluable in infantile therapeutics. Its action is prompt and energetic. It is perfectly innocuous. The tincture in mitral or aortic lesions with hyposystole and oliguria restores cardiac tone, regulates the rhythm, and strengthens the pulse. In infantile pneumonia or broncho-pulmonary affections, accompanied by cardiac weakness, strophanthus is a valuable heart tonic. M. Moncorvo has not observed any marked influence on the nervous system or temperature. The action of strophanthus persists long after the treatment has been discontinued. M. Moncorvo employed an alcoholic tincture in doses varying from four to twenty-eight drops in twenty-four hours.

PHENYL-HYDRAZIN DERIVATIVES AS ANTI-PEYRETICS.—Dr. Heinz, who has been engaged in the pharmacological laboratory of the University of Breslau under Professor Filehne, in preparing and examining a number of new phenyl-hydrazin derivatives, finds that they are all, in consequence of their tendency to act as blood poisons, entirely unsuitable for medical purposes as antipyretics. He consequently believes that antipyrin, which does not poison the blood, is not a phenyl-hydrazin derivative,

although it is prepared from it by first acting upon it by acetic ether and then methylizing the product. He suggests that an entirely new chemical body is formed, from which, rather than from phenyl-hydrazin, antipyrin must be considered a derivative.—*London Lancet*.

THE USE OF CALOMEL IN THE TREATMENT OF PIITHISIS.—(*Rev. Mens. des Mal. de l'Enf.*, July, 1889.) Doehmann is in favor of this drug when the disease is in the first and second stages. Under its influence it has been observed that the appetite returned, and that there was diminution of the cough, the fever, and the night-sweats, while the diarrhea ceased. The following formulæ are recommended:

Calomel.....	12 gr;
Pepsin.....	57 gr;
Tinct. opii.....	30 drops;
Extr. phellandriæ.....	q. s.
M. and ft. pil. nu. lx.	

Calomel.....	12 gr;
Pepsin.....	57 gr;
Ergotini.....	1½ gr.
Règlisse.....	q. s.
M. and ft. pil. nu. lx.	

For hemoptysis:

Calomel.....	12 gr;
Pepsin.....	57 gr;
Extr. hyoscyamini.....	6 gr.
“ phellandriæ.....	q. s.
M. and ft. pil. nu. lx.	

The first day one should take two pills every two hours, or twelve in the course of a day; the second day, ten; and the third day, eight. After the fourth day six pills daily should be taken for a month or two. If the fever should be intense, twelve or fourteen pills daily may be given while it lasts. Every five or six days the treatment should be suspended for two or three days. Pepsin is added to the pills, as it increases the solubility of the calomel. Whether the calomel has a specific action upon the tubercle bacillus can not be stated with positiveness; but it must not be forgotten that mercury is the most valuable of parasitocides in syphilis, typhoid and typhus fevers, erysipelas, cholera, dysentery, diphtheria, and pneumonia. Its antiphlogistic action, also, in the treatment of tuberculosis is of great value.—*Archives Pediatrics*.

LARGE DOSES OF ARSENIC IN LYMPHADENOMA.—At a late discussion at the Paris Academy of Medicine, M. Reclus read notes on eight cases of cervical lymphadenoma treated

by large doses of arsenic. The initial dose given was ten drops of Fowler's solution, which was given daily, gradually increased; interstitial injections were also given every two days. The solution was mixed with an equal quantity of water, and the dose gradually increased to twenty drops. Three patients thus treated were cured; three died rapidly; with the two others the treatment had to be discontinued. M. Berger stated that he had often seen in Dolbeau's wards examples of relapse after removing glands, and personally had always found internal arsenical treatment joined to interstitial injections satisfactory. In three cases, one exhibited great improvement; the other two patients died. M. Terrier is also in favor of arsenical treatment of lymphadenoma when limited to internal treatment. He condemns the practice of interstitial injections, and prefers making an incision, which he deems necessary in order to be certain of arriving at a true diagnosis.—*The British Medical Journal*.

PERIODIC GASTRORRHEA.—Dr Steinberg gives an account of a remarkable case of periodic gastrorrhœa occurring in a military officer, aged forty-five. The patient was suddenly seized with a series of attacks of violent vomiting coming on every forty to sixty minutes, each attack being preceded by severe nausea and headache, which symptoms disappeared immediately after the contents of the stomach had been ejected. The vomit consisted of a greenish watery fluid, containing 0.17 to 0.21 per cent of free hydrochloric acid and a very little mucus, but no traces of food. There was no abdominal pain or tenderness. On inquiry it was found that the patient had been subject to attacks of this nature at long intervals for several years. There were signs of lesion of the posterior columns of the cord, but these were limited to Westphal's and Romberg's phenomena, and there was no ataxy; thus the diagnosis was made of periodic gastrorrhœa in a tabetic subject rather than that of gastric crisis in an ataxic subject.—*The British Medical Journal*.

TREATMENT OF THE ECZEMA OF DENTITION. (*Journ. de Méd. de Paris*, July 28, 1889.) Besmer's opinion is that this form of eczema is a reflex eczema of the face, or of the back of the hand, being manifested by sensitiveness of the gums and salivation. There are three indications: First, to calm the pruritus of the gums; second, to overcome the insomnia; third, to cure the local condition. For the

first indication it is advised to rub the gums frequently with the finger, moistened with the following solution:

Cocaini mur.....	$\frac{3}{4}$ gr;
Potass. brom.....	8 gr;
Aque dest.....	150 M;
Glycerine.....	150 M.

For the second indication, the following mixture may be given in doses of a teaspoonful or a dessertspoonful:

Sodæ brom.	5 to 8 gr;
Syr. auran. flo.....	2 $\frac{3}{4}$.

For the local condition, applications of the following ointment should be made:

Zinci oxidi.....	150 gr;
Vaseline.....	1 $\frac{3}{4}$.

The affected parts should also be covered with a thin rubber or muslin mask.—*Archives of Pediatrics*.

EMBALMING.—The best process of embalming is called the "Brunelli Process." The circulatory system is cleansed by washing with cold water till it issues quite clear from the body. This may occupy from two to five hours. Alcohol is injected so as to take out as much water as possible. This occupies about a quarter of an hour. Ether is then injected to abstract the fatty matter. This occupies from two to ten hours. A strong solution of tannin is then injected. This occupies for imbibition from two to ten hours. The body is then dried in a current of warm air passed over heated chloride of calcium. This may occupy from two to five hours. The body is then perfectly preserved and resists decay.—*Sanitarian*.

PAPAIN (FROM THE FRUIT OF THE PAPAW, CARICA PAPAYA), THE NEW VEGETABLE PEP-SIN AND DIPHThERIC MEMBRANE SOLVENT.—Dr. W. C. Campbell, of Chicago, recommends for a spray the following:

Papain, L. & F.....	.3ij;
Hydronaphtol.....	gr.ij;
Acid. hydrochloric, dil.....	gtt xv;
Aq. destil.....	ad $\frac{3}{4}$ iv. M.

Dr. S. H. Dupon, Harrack, Ga., employs by local application:

Papain, L. & F.....	.5ij;
Eucalyptol.....	.3ij;
Glycerin.....	.5ss. M.

SOME four hundred of the physicians of Brooklyn have formed a protective association for the purpose of avoiding bad debts, and have published for their own information a black-list of persons who can, but do not pay their doctor's bills.

The American Practitioner and News

"NEC TENUI PENNÂ."

Vol. IX. SATURDAY, MAY 10, 1890. No. 10.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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KENTUCKY MEDICAL SOCIETY.

As we have been informed, officially, non-officially, and by gratuitous advisement, and as we predicted last year, the coming meeting at Henderson bids fair to be an extraordinary event in the life of this eventful society. Every preliminary, scientific, polemic, forensic, philanthropic, bibulous, and bulimic, has been carefully provided for, if not reduced to mathematical accuracy by the able president, secretaries, and committees to whom the work has been intrusted. It is not necessary to hint that the attendance will be large, nor to repeat the aboriginal chestnut that "the delegates will receive a genuine Kentucky welcome."

The programme, which we append in all its length and beauty below, is, to say the least, liberal. Beside the ordinary business proceedings and two set addresses, fifty-two papers are to be read, digested, and discussed. This mass of scientific lore and eloquence, if it "come tardy off," might justify a prognosis of slight weariness in the soul of the willing listener. If the president can succeed in getting it gracefully delivered and disposed of in the space of three days, he will have accomplished a feat unparalleled in the annals of medical societies. We have no doubt that his effort to attain the desired end will be hercu-

lean, and that he has carefully coned that by-law which prescribes that the discussions shall be fit as to relevancy and time. We would suggest that the administration be herculean in something more than a metaphorical sense, and that he come to the chair with a club big enough and a *vis-a-tergo* of sufficient quantity and intensity to knock down all interlopers and conscienceless consumers of time. A glance at the programme will, we trust, show that we do not overstate the ease. It behooves every member to do his best to make the work of the president as light as possible. The American Practitioner and News has made arrangements to provide its readers with a full report of the proceedings, and copies of the numbers containing this report will be mailed to every member of the society who may be so unfortunate as not to be a subscriber. Come and welcome, in good numbers and in good time, and here's to you in advance!

"The thirty fifth annual session of this society will be held at Henderson, May 14, 15, and 16, 1890.

"*Officers:* President, John A. Ouechterlony, M. D., Louisville; Vice-President, William Jennings, M. D., Richmond; Second Vice-President, Robert L. Willis, M. D., Lexington; Permanent Secretary, Steele Bailey, M. D., Stanford; Assistant Secretary, John Young Brown, M. D., Henderson; Treasurer, James B. Kinnaird, M. D., Lancaster.

"*Board of Censors:* H. Brown, Chairman, Hustonville; T. B. Greenly, M. D., Secretary, West Point; S. M. Willis, M. D., Pine Grove; J. B. Evans, M. D., Riley; W. E. Rodman, M. D., Hodgenville; Charles Mann, M. D., Nicholasville.

"Chairman Committee of Arrangements, James H. Letcher, M. D., Henderson.

"Reduced rates have been granted on all railroads in Kentucky. When you purchase your ticket do not fail to ask the agent for a certificate that you have paid full fare one way. Present this early in the session to the secretary for his signature. The steamboat lines have also given reduced rates of transportation, agreeing to sell to members and their families round trip tickets from Louisville at \$6, which includes meals and berth.

"Both members and guests are invited and urged to take part in the discussion of the various papers presented. Discussions will usually be opened by some member selected for that purpose, but others are expected to participate."

PROGRAMME.

FIRST DAY (WEDNESDAY), 2:30 P. M.

Reading of the Minutes of 1889.
 Report of the Committee of Arrangements.
 Report of the Committee on Credentials.
 Report of the Treasurer.
 Report of the Permanent Secretary.
 Report on Progress in Practical Medicine, by F. C. Wilson, M. D., Louisville. Discussion by J. W. Gilbert, M. D., William Bailey, M. D.
 Report on Progress in Surgery, by Arch'd Dixon, M. D., Henderson. Discussion by W. L. Rodman, M. D., Jos. M. Mathews, M. D.
 Report on Progress in Obstetrics, by Fayette Dunlap, M. D., Danville. Subject, Puerperal Fever, a Preventable Disease. Discussion by Turner Anderson, M. D., J. H. Letcher, M. D.
 On Methods of Diagnosis in Pelvic Diseases, by L. S. McMurtry, M. D., Louisville. Discussion by W. H. Wathen, M. D., Richard Douglass, M. D.
 A case of Pyosalpinx, with Intestinal Laceration and Omental Grafting, by J. G. Carpenter, M. D., Stanford. Discussion by A. W. Johnstone, M. D., W. O. Roberts, M. D.
 On Gunshot Injury of the Spine, with Paralysis; death after four years, M. E. Alderson, M. D., Russellville. Discussion by H. Brown, M. D., H. Orendorf, M. D.
 Report on Pathological Histology and Urinalysis, by Simon Flexner, M. D., Louisville. Discussion by H. A. Cottell, M. D., J. B. Marvin, M. D.
 Report on Lithemia and Uric Acid Diathesis in affections of the Eye, Ear, and Throat, by W. Cheatham, M. D., Louisville. Discussion by S. G. Dabney, M. D., W. B. McClure, M. D.
 Report on Neurology, by J. Ford Barbour, M. D., Louisville. Discussion by F. C. Wilson, M. D., W. Bailey, M. D.

An Operation for Vesico-Vaginal and Recto-Vaginal Fistules, by W. H. Wathen, M. D., Louisville. Discussion by David Barrow, M. D., A. C. Bernays, M. D.

Report on Otology, by S. G. Dabney, M. D., Louisville. Discussion by J. M. Ray, M. D., W. Cheatham, M. D.

Surgery of the Pleura, by A. M. Cartledge, M. D., Louisville. Discussion by A. W. Johnstone, M. D., W. L. Rodman, M. D.

Report on Materia Medica, by William Webb, M. D., Bryantsville.

EVENING SESSION, 8 O'CLOCK.

Address of the President, John A. Ouchterlony, M. D., Louisville.

Address, Materialism versus Sentiment in the Study of the Causes and Correction of Crime, by G. Frank Lydston, M. D., Chicago.

SECOND DAY (THURSDAY), MORNING SESSION, 8 O'CLOCK.

Miscellaneous Business, limited to one hour.

Report on Fistula in Ano, its Pathology and Treatment, by J. M. Mathews, M. D., Louisville. Discussion by W. L. Rodman, M. D., J. G. Brooks, M. D.

On Treatment of Hemorrhoids, by J. H. Letcher, M. D., Henderson. Discussion by J. M. Mathews, M. D., A. M. Cartledge, M. D.

A Regional Study of Tumors, by W. L. Rodman, M. D., Louisville. Discussion by J. W. Pryor, M. D., C. Skinner, M. D.

The Technique of Supra-Vaginal Hystereotomy, by Richard Douglass, M. D., Nashville. Discussion by L. S. McMurtry, M. D., W. H. Wathen, M. D.

Report on Ophthalmology, by D. S. Reynolds, M. D., Louisville. Discussion by S. G. Dabney, M. D., M. F. Cooms, M. D.

The Importance of Correcting Errors of Refraction in Children, by F. D. Green, M. D., Louisville. Discussion by W. Cheatham, M. D., J. M. Ray, M. D.

On Circumcision, by E. R. Palmer, M. D., Louisville. Discussion by A. M. Cartledge, M. D., J. Y. Brown, M. D.

Report on Genito-Urinary Surgery, by Jno. Young Brown, M. D., Henderson. Discussion by John M. Foster, M. D., E. R. Palmer, M. D.

Some of the Common Errors in Gynecological Practice and the Ills Resulting from Them, by David Barrow, M. D., Lexington. Discussion by John G. Cecil, M. D., Chas. M. Mann, M. D.

On Summer and Autumnal Fevers in Central Kentucky, by William Jennings, M. D., Richmond. Discussion by D. T. Smith, M. D., Pinckney Thompson, M. D.

On Pleuritic Effusions, by C. W. Aitken, M. D., Sherburne. Discussion by I. N. Love, M. D., A. R. Jenkins, M. D.

On Tubercular Peritonitis, by John G. Cecil, M. D., Louisville. Discussion by F. C. Wilson, M. D., H. C. Herring, M. D.

On Acute Intussusception of the Intestines, by J. O. Jenkins, M. D., Newport. Discussion by C. T. Stillman, M. D., W. O. Roberts, M. D.

On Exanthematous Fevers in Children, by I. N. Love, M. D., St. Louis. Discussion by J. A. Larrabee, M. D., J. F. Purdom, M. D.

On Infant Feeding, by J. A. Larrabee, M. D., Louisville. Discussion by I. N. Love, M. D., J. C. Bogle, M. D.

The Mechanics of Stretching the Spine in Locomotor Ataxia, with a Description of the Various Methods for its Accomplishment, by Chas. T. Stillman, M. D., Chicago. Discussion by G. Frank Lydston, M. D., Ap. Morgan Vance, M. D.

On Vesical Calculus and its Treatment, by B. L. Coleman, M. D., Lexington. Discussion by Wm. Jennings, M. D., Arch'd Dixon, M. D.

Report on Brain Surgery, by C. Skinner, M. D., Louisville. Discussion by H. H. Grant, M. D., Patton Griffiths, M. D.

AFTERNOON SESSION, 2 O'CLOCK.

The Ophthalmoscope as an Aid to the Diagnosis of Certain Diseases of the Central Nervous System, by J. M. Ray, M. D., Louisville. Discussion by D. S. Reynolds, M. D., J. Ford Barbour, M. D.

The Relation Between the Nose and the Eye in Disease, by John Y. Oldham, M. D., Lexington. Discussion by J. G. Carpenter, M. D., F. O. Young, M. D.

On Early Laparotomy in Ectopic Gesta-

tion, by A. C. Bernays, M. D., St. Louis, Mo. Discussion by L. S. McMurtry, M. D., R. Douglass, M. D., W. H. Wathen, M. D.

On the Management of Abortion, by Andrew Seargent, M. D., Hopkinsville. Discussion by W. W. Cleaver, M. D., W. W. Coleman, M. D., J. O. McReynolds, M. D.

Wound Drainage, by Ap. M. Vance, M. D., Louisville. Discussion by A. C. Bernays, M. D., A. J. Cowan, M. D.

On the Treatment of Endometritis, by Theo. L. Burnett, M. D., Louisville.

On Endometritis, by L. F. Royston, M. D., Smith's Mills. Discussion by R. C. McCord, M. D., P. B. Scott, M. D.

On Congenital Atresia of Vagina, involving the Cervix Uteri, by J. B. Taulbee, M. D., Mt. Sterling. Discussion by J. B. Evans, M. D., W. E. Rodman, M. D.

Report on Rhinology, by M. F. Coomes, M. D., Louisville. Discussion by J. G. Carpenter, M. D., J. B. Kinnaird, M. D.

On Chronic Hypertrophic Rhinitis, by W. B. McClure, M. D., Lexington.

On Periodical Hyperesthetic Rhinitis, by J. B. Kinnaird, M. D., Lancaster. Discussion by W. Cheatham, M. D., M. F. Coomes, M. D.

On Empyema, by W. O. Roberts, M. D., Louisville. Discussion by W. L. Rodman, M. D., J. N. McCormick, M. D.

A Comparison of Birth-Rate between Civilized and Semi-Barbarous Nations, by T. B. Greenly, M. D., West Point.

THIRD DAY (FRIDAY), MORNING SESSION, 8:00 O'CLOCK.

Report on Hygiene, by J. N. McCormick, M. D., Bowling Green. Discussion by J. M. Poyntz, M. D., Pinckney Thompson, M. D.

On Hyperpyrexia and Antipyretics, by W. A. Quinn, M. D., Henderson. Discussion by J. B. Taulbee, M. D., Joseph Price, M. D.

Report of some Surgical Cases of Interest, by Matt. T. Scott, M. D., Lexington. Discussion by A. W. Johnstone, M. D., Harry Cowan, M. D.

On Some of the Unrecorded Dangers from Tooth Inflammation, by A. R. Jenkins, M. D., Sturgis.

A Mysterious Abdominal Tumor, with Exhibition of Patient, by A. R. Jenkins, M. D., Sturgis.

Report on Dermatology, by H. Orendorf, M. D., Louisville. Discussion by I. N. Bloom, M. D., J. C. McGuire, M. D.

On Cancer of the Cervix Uteri, by Robert Stuart, M. D., Zion. Discussion by David Barrow, M. D., J. P. Thomas, M. D.

Report of Case of Abscess of Lung following Pneumonia; Drainage through Chest Wall; Recovery, by Turner Anderson, M. D., Louisville. Discussion by F. C. Wilson, M. D., D. D. Robertson, M. D.

Report of Case of Perforation of the Appendix Vermiformis, by W. V. Cook, M. D., Corydon. Discussion by C. Skinner, M. D., J. H. Letcher, M. D.

On the Advantage of Cutting Off Both Ends of the Silk Ligature and Closing the Wound Over it in all Amputations, by J. O. McReynolds, M. D., Elkton. Discussion by Arch'd Dixon, M. D., W. O. Roberts, M. D.

Notes and Queries.

MR. GLADSTONE ON THE MEDICAL PROFESSION.—On Wednesday, March 26th, Mr. Gladstone, as Senior Governor of Guy's Hospital, opened a new medical college in connection with that institution. Mr. Gladstone, who was accompanied by Mrs. Gladstone, was met at the entrance to the college by Mr. H. Hueks Gibbs, the President, and the members of the governing body, and conducted, amid the cheers of a large crowd, to the dining hall, where luncheon was served. In responding to the toast of "Prosperity to Guy's Hospital," the right honorable gentleman said he "could not possibly look back on the history of the medical profession without being impressed with the extraordinary degree in which it presents most special features to us. If we travel back, say two or three centuries, we find the medical profession almost without a recognized existence. In the competition with the other great professions, only a short time back, it was nowhere. The great name of Harvey was known, but as regards its social position and influence the time

of Dr. Freind and Dr. Mead in the last century was almost the first period to which one could point at which the medical man of this country had assumed a position of influence and power and general recognition. That profession has been steadily rising in power and influence and general respect from that date to this, and it is my belief that it will continue to rise. The growth of civilization, as we call it, in a large and comprehensive, but also in a very loose and indefinite phrase, carries with it the production of many new forms of human infirmities and disease, and men's wants in the medical sphere are the opportunities of the medical man. His position is in many respects singularly fortunate and favorable. In the first place I am inclined to doubt for myself whether, as regards the mere question of remuneration, the medical profession does not offer on its threshold as good opportunities of, in some cases, even liberal return with as little risk as either of the other great professions." Having referred in appropriate terms to Sir William Gull, the right honorable gentleman said: "I am delighted when I hear of the creation of great fortunes in this country that are not merely commercial. It is an excellent thing that large fortunes are made in commerce, by the handling of money, by the supply of the country with material goods; but it is desirable that their power and influence should be qualified by the creation of other fortunes, such as now, almost for the first time, we find beginning to be created by medical men. I rejoice to think that the medical man, who spends his talent and strength as freely in the performance of his duty as any member of any other profession, will be able to make a competent and even large provision for his family. Another point upon which I congratulate the profession is its independence. It does not rely on endowment, but on its own exertions directed to meeting human wants. There is no great profession which has so little to say to the public purse, and which so moderately and modestly dips its hand into that purse. It is not only in the interest of the public, but of the profession itself, that it is eminently self-supporting; and, rely upon it, that principle of self-support does much to maintain its honor and independence,

and to enable it to pursue its stately march in the times that have come and in the times that are coming, to form its own convictions, to act on its own principles without fear or favor, for the general benefit of mankind."—*The London Lancet*.

PRESCRIPTION WRITING.—The trial of a case of homicide has recently been concluded in the Paris courts, after having lasted for nineteen months. The facts of the case were briefly as follows: A druggist's apprentice, in putting up a physician's prescription, dispensed hydrochlorate of morphine instead of hydrochlorate of ammonia. A child two and a half years old was given the medicine and died. The testimony of experts was brought to bear upon the case, and it was finally proved that the child died from the ingestion of nearly half a grain of morphine. It was also shown that this drug had not been prescribed by the attending physician. A verdict of guilty was therefore rendered against the apprentice, and he was sentenced to fifteen days' imprisonment and a fine of two hundred francs, while the druggist was ordered to pay five thousand francs damages.

Our own country is by no means exempt from similar accidents, and cases in which a druggist's misunderstanding of a physician's prescription has been followed by disastrous results occur only too frequently. A large proportion of the profession seem to make a point of writing their prescriptions as illegibly as possible. The names of drugs are frequently abbreviated almost beyond recognition, and the quantities and directions are most ambiguous. Pharmaceutical journals frequently contain puzzles, in the shape of illegible prescriptions, which often defy interpretation.

The *Journal de Medicine*, of Paris, March 16, 1890, in commenting upon the case mentioned above, suggests certain rules which it would be well for physicians in this country, as well as in France, to conscientiously adopt. They read as follows:

1. Physicians should always write their prescriptions very plainly and legibly.
2. The names and doses of all toxic drugs should be written out in full.
3. Full instructions regarding the exact use

of the remedy should be appended to every prescription.

The pharmacist, on his part, should never put up a prescription when there is the least doubt in his mind as to its correctness or meaning; be it either the signification of a single word, or an uncertainty regarding the manner of using the preparations. In all cases of doubt, he should obtain an explicit explanation before proceeding to put up the prescription. In case of an error on the part of the physician, either through inadvertence or ignorance, the pharmacist should refuse to dispense the prescription until the mistake has been corrected. Finally, all druggists would do well never to allow their apprentices or students to put up any prescriptions containing poisonous substances.—*Medical and Surgical Reporter*.

DOMESTIC FILTERS FOR DRINKING WATER. The American Analyst, March 20, 1890, contains an article by P. T. Austin, taken from the Scientific American, part of which we think well worth reproducing:

During the last few years the subject of water purification has received much attention, and successful methods have been introduced for filtering and purifying water on a large scale. Filtration on a small scale, while successful in many cases, comes, as a rule, under housekeeping, and the success or failure of the method will therefore often depend entirely on the operative ability of some domestic. While I do not wish to undervalue any of the excellent small filters now on the market, I desire to explain a simple method by which any housekeeper of average intelligence can make an inexpensive contrivance which will do its work in a way not easily surpassed by any filter that can be bought. It has been known for many years that the addition of a minute amount of alum to a water containing bicarbonate of lime in solution (and most natural waters contain more or less of this substance) will cause the formation of a gelatinous precipitate. This precipitate entangles and collects the suspended matters and germs, forming coagulated or agglomerated masses which are easily removed by simple filtration. Waters containing clay or mud which is so fine that a

mechanical filter can not remove it, when treated with a small amount of alum can be filtered perfectly clear through a coarse filter. The alum thus added is not left in the water, but is removed by the filtration, for its active constituent, the aluminic sulphate, is decomposed and precipitated by the action of the dissolved bicarbonate of lime. This should be well understood, although if a minute amount of alum were left in the water its effect would not be noticeable, and even if present in larger amounts it would not be at all dangerous. The method of filtration is simple in the extreme. An oil bottle or any long, narrow-necked bottle serves for the filter. Tie around it a string soaked in kerosene, about half an inch from the bottom, set the string on fire, and hold the bottle bottom up. When the string is burnt out, the bottom of the bottle is thrust into cold water. If properly done, this causes the bottom of the bottle to split off evenly. The rim of the glass should now be burred off a little with a round file to remove any sharp edges that may be left. The bottle is then thoroughly cleaned and placed neck downward in a convenient support, as, for instance, through a hole bored in a shelf, or it may be allowed to stand in a wide-mouthed bottle, resting by its shoulders on the rim of the mouth. A small handful of cotton wool is now thoroughly wetted by squeezing it in water, and shreds of it are dropped into the bottle until a layer of about two inches deep has been made. The shreds should be dropped in carefully, so as to distribute them evenly, and not to let them pile up in the middle or at the sides. When enough cotton has been dropped in, a cup or two of water is poured in and the bottle gently tapped. This consolidates the mass and finishes the making of the filter-bed. The amount of alum needed to coagulate the water sufficiently for filtering need not, as a rule, exceed two grains to the gallon, and in many instances may be less; but in certain cases of very dirty waters, such as that of the Mississippi River, the amount of alum may be increased to four or even six grains per gallon. The alum is best kept in a solution of such a strength that a teaspoonful of it will contain a grain. To save trouble, the following prescription will

enable one to get enough of the solution put up at any apothecary's to last for a considerable time: Alum, 128 grains; distilled water, one pint.

I may add that the expense of this prescription, including the bottle, should not exceed fifteen cents.

The treatment and filtration of the water is best done as follows: A gallon of water is placed in a clean tin pail and two teaspoonfuls of the alum solution are added. It will save time to make, once for all, scratches on the inside of the pail, showing the height of one, two, or more gallons of water. It is then well stirred with a clean tin dipper. It is best to keep this pail and dipper for this use alone. They should be kept scrupulously clean and frequently well scoured with sapolio or a similar kind of soap. After mixing, the water is allowed to stand five or ten minutes, and then poured, by means of the dipper, into the filter. It will run through rapidly if the filter-bed has been properly made, and will be as clear as crystal, and not seldom will form an astonishing contrast with the original water. The first half pint of the water passing through should be rejected. The filtered water may be caught in a pitcher or in any other convenient receptacle. A filter-bed will last a day, but it is not advisable to use it longer. Each day the used filter-bed should be thrown away and a fresh one prepared. The method may, of course, be applied to any of the many filters in use, simply adding to the water to be filtered one or two grains of alum to the gallon. It will be a poor filter, indeed, that will not filter clear after this addition. Of late, attention has been drawn to the latent dangers in ice. It has been found that this apparently harmless and attractive substance may fairly reek with disease germs and filth of all kinds. Unless it is known from whence the ice comes, its use may be more dangerous than the use of water. Ice is sometimes derived from water which no one would think of drinking, as, for instance, from ponds in cemeteries and from rivers in the neighborhood of sewer outlets, and as a result may be indescribably foul. Aside from the danger of germs lurking in ice, there is risk in the indiscreet use of water cooled to an ab-

normally low temperature, since functional disorders are often caused by the drinking of very cold water. No water is so refreshing as a mountain spring, and one reason of this is that its temperature is just right. It is well to take hints that are given by nature, and the hint that the best temperature of drinking water is about fifty degrees Fahrenheit is a good one, and worth following.—*Medical and Surgical Reporter*.

ON APPARENT DEATH.—M. Brouardel (*Gaz. des Hôpit.*, No. 55, 1889) thinks that too often physicians consider individuals as being dead when they are not so in reality. Aged people, he states, infants, the newly born, and all enfeebled persons are predisposed to apparent death. It is a well-known fact, it is alleged, that after a difficult labor the newly born is apt to be apparently dead for two, three, and sometimes four hours; and that those who are familiar with the life of newly born animals know that often they begin their respiration after the administration of a warm bath lasting for half or an entire hour; and, according to Paul Bert, the newly born has a special resistance of its tissues that accounts too for the tolerance to certain intoxications, as that of strychnine.

The physician is most apt to be deceived by hysterical persons, who are capable of living like hibernating animals, producing three instead of twenty grams of urea, and forty instead of five hundred and fifty grams of vapor in the twenty-four hours. Under such conditions a false diagnosis is apt to be made, the falsity being recognized, in case of hysterical patients, at the critical moment; as the author expresses himself, at the moment the person is to be laid in the coffin.

In persons convalescing from grave diseases, the author goes on to say, syncope is easily induced at the moment the patient rises; the deficient cerebral circulation and venous stagnation in the lower limbs are favorable conditions to the occurrence of apparent death. He further relates the case of a criminal who was hung in Boston at 10 A. M., taken down at 10:25 A. M., and transferred to the anatomical amphitheater an hour thereafter, when his

pulse recommenced to beat. On opening the thorax, the pulse was seen to beat 40 a minute, and it stopped beating at 2:45 P. M. A similar case of Hoffman's is quoted. In this case the explanation of the accident is that the cerebral blood supply, though deficient, yet was enough to maintain life.

The author does not accept this reason; it seems illogical to him that the heart should stop under the influence of simple cerebral anemia, when it continues to beat for about twenty minutes after complete decapitation.

He believes that in infectious diseases and algid fevers there are a good many examples of resurrection: the ptomaines he considers to have characteristic anesthetic properties; injected into a frog, the latter assumes any given cataleptic properties that may be desired.

Allusion is made to the apparent death of animals subjected to congelation. One similar fact is reported to have happened in a grenadier; the man passed three hours in the water in the month of January; resuscitation was brought about by virtue of the persistent care of a young surgeon that was intimately attached to him. Another series of apparent deaths, the author states, is to be looked for in commotion of the nervous system by lightning, which is at the head of the list of causes.

M. Lestier's seven cases are quoted, where the subjects, under the action of lightning, had remained apparently dead for periods varying from several minutes to three hours. Physicians who took the observations stated that no pulse could be felt at all, the excitation having been strong enough to stop the heart's action. A case of Budin's is recited in which a sailor is said to have fallen apparently dead under the influence of an electric discharge; all means used failed to resuscitate the man; he was finally subjected to the influence of hailstones that were falling on the deck, and resuscitation was successfully brought about after continuous treatment for an hour and fifteen minutes. Other facts are related, and it is concluded that such cases are to be classed under the heading of syncope or cerebral commotion. The author alludes to the fact that people have been buried for eight and fifteen days, and yet been resuscitated.

The caution is given not to mistake alcoholic cases; two such are reported in which the subjects were restored to life, one of M. Laborde's, in which the rectal temperature had been 24° C.; the second, M. Bourneville's, in which the rectal temperature had been 25° C.

The author says in a convincing manner that physicians are too hasty to diagnosticate death in unfortunate cases of the use of anesthetics; he thinks that much more time should be spent in trying resuscitation before the case is pronounced hopeless. He finally advises great caution in diagnosing death, especially in cases of hysteria and syncope. It is easy to hear the heart beat, he alleges, when the heart muscle is contracting vigorously, but in experiments of vivisection it is well known that the heart, without actually stopping, may at the same time not be heard for a certain period.—*New York Medical Journal*.

THE ANALGESIC ACTION OF EXALGINE.—Exalgine is one of the most important of the newer compounds. If present indications persist, this drug will survive not a few of its rivals for popularity. This opinion, which has led us to keep a close watch upon the reports of those who have made trial of the drug, has been materially strengthened by a clinical lecture by Dr. Thomas R. Fraser, of Edinburgh, published in the *British Medical Journal* for February 15th. Dr. Fraser is the professor of materia medica in the University of Edinburgh, and is favorably known for his studies of the African ordeal poisons. He presents a table of eighty-eight separate administrations of exalgine to twenty-one patients, which gave relief in sixty-seven instances, and in twenty-one afforded no benefit. In cancer of the liver, aneurism of the aorta, and lumbar abscess there were nine trials, two, four, and three each in the order named, with nine failures. In other affections deemed suitable for trial there were seventy-nine administrations with twelve failures to obtain relief; about sixty of these may be classed as neuralgic, while twenty were rheumatic or carcinomatous with one or two exceptions. The condition of some of the patients was not one in which the pain could fairly be expected to be

dissipated save by a drug that would produce general narcotism. This is not the property of exalgine. It is not an overpowering analgesic, but it has the enormous advantage of being free from the disturbances and inconveniences that are associated with the action of nearly all other pain-subduing drugs, and from the dangers inseparable from the use of the more powerful of them. The doses given ranged from half a grain to four grains; one-grain doses were frequently followed by relief, lasting from two to twelve hours, making itself felt sometimes in fifteen minutes, and sometimes requiring forty minutes. The largest quantity given in twenty-four hours was fourteen grains, and it seemed not to be followed by any disagreeable, much less dangerous, effect. The majority of the persons experimented upon in this series were inmates of the hospital.—*Ibid*.

DIPHTHERIA, ITS TREATMENT.—In the North Carolina Medical Journal for March, 1890, Dr. E. B. Goelct, of Saluda, N. C., has an excellent practical paper on diphtheria, in which he says:

The symptoms vary from simple sore throat to complete constitutional prostration. Usually there is, at first, a *malaise* or tired feeling with loss of appetite; next the throat becomes sore, and there is languidness with fever; then the eyes get dull, showing constitutional depression and feebleness; the tonsils are only slightly enlarged out of proportion to the constitutional symptoms; then appears a general redness of the palate, pharynx, and tonsils, with dusky reddened blotches and white or ash-colored spots, spreading rapidly and developing in glandular enlargements; the inflamed surface exudes false membranes, containing micrococci, which inoculate all other surfaces in contact therewith; and finally the disease expresses itself anywhere on the body there is an abrasion. If let alone the tendency is to death by suffocation, on account of the spread and rapid growth of these false membranes. The involved cervical glands increase enormously. Blood-clots may form and attach themselves to the valves of the heart, then be swept off as emboli.

In tonsillitis there is a sharp attack of fever,

high temperature, and enlarged tonsils, with no history of *malaise*; the eyes are bright, there is no languor or prostration, the swelling and redness confined to the tonsils.

In follicular tonsillitis there is no fever, no constitutional depression, but very enlarged tonsils on both sides, covered with patches in the depressions of the tonsils; but these patches are superficial and easily removed; in a day or two, under proper treatment, the patches reduce in size and soon disappear.

In scarlet fever the symptoms resemble diphtheria, but the eruption appears in the first twenty-four hours, the throat symptoms come on later, and the redness is scarlet and diffused.

In diphtheria the fever is slight, of low grade, resembling an asthenic type, the eyes are dull, and there is constitutional depression, simple enlargement of the tonsils, inflamed palate and pharynx, with whitish spots or patches appearing upon a reddened base; the spots are adherent and apt to cause a flow of blood when removed; there may be an eruption, but that comes on later. The early symptoms are confined to the throat, the patches spread rapidly and inoculate all surfaces in contact with them.

The treatment should be based upon constitutional theory. A proper germ-poison put into the blood will arrest its development and destroy the membrane. Sulphur and chlorine are the most potent germicides known. Now we want to get sulphurous acid into the blood; and in order to do so we give the sulphite of sodium. It will not hurt the patient, but will destroy the germ and be excreted by the kidneys as a sulphate. From twenty to thirty grains taken every two hours will keep up a continuous action; large doses act as a purgative, but do no harm. As a local application use chlorine water. I usually generate it in this way: Take chlorate of potash, 5ij, and hydrochloric acid [the writer probably meant to say *sulphuric* acid], Mxx; put into a well-stoppered eight-ounce vial, and when decomposition has taken place, add through a glass funnel glycerine, f5ij, to absorb the chlorine; then add water to fill the vial. Use this as a gargle, and it will clean off the membrane as a wet sponge does a slate. It can be even given in doses of f5j every

three hours. As a prophylactic I prefer the sulphite of sodium; for chlorine is a powerful cardiac stimulant and diuretic, and is best suited to severe cases. I have had a number of cases this fall and winter, and have lost only one.

I have a firm conviction that, if called to see a patient in time, with this treatment there should be no fear as to the result.

ABSENCE OF MALARIA ON THE EASTERN SHORE OF MARYLAND.—In a pamphlet on the Climate of the Eastern Shore of Maryland, Dr. C. W. Chancellor, Secretary of the Maryland State Board of Health, says that for a long time the eastern shore of Maryland has rested under a reputation such as is likely to arise from a careless observation of her physical constitution and relations; but the light of investigation and experience has in a measure dispelled this belief.

The salubrity of any particular locality can not always be exactly interpreted from local conditions, or a mere string of figures be said to represent meteorological phenomena. They are, however, very valuable in conjunction with other knowledge; and any information obtained from intelligent physicians and other persons who have lived long in a place as to its general salubrity is valuable in forming a judgment of the healthfulness or unhealthfulness of a locality. He has gathered as much of such knowledge as possible in regard to the salubrity of the eastern shore. Reports from a considerable number of local health officers, physicians, and correspondents show that, whatever may have been the condition of this section of the State, as regards malarial and other diseases, in former years, it is now exceptionally healthy; in fact, it is more exempt from disease than any other district in the State of equal area and population. This is especially true in respect to malarial fevers and pulmonary consumption.

The facts which have been obtained indicate that malarial diseases have greatly diminished on the Peninsula in the past ten or fifteen years, and that, exclusive of small areas affected by local conditions, the proportion of uncomplicated malarial fevers to all other cases

of disease is not more than two per cent. This great reduction in the number of cases has been secured through a better knowledge of how to avoid the causes of disease, rather than from any system of medication; and it is hoped that, by further application of well-known sanitary laws, intermittent and remittent fevers will be banished from the list of prevailing diseases on the eastern shore of Maryland.—*Medical and Surgical Reporter*.

ORTHIN.—Orthin is the designation of another new antipyretic, an orthophydrazin-paraoxybenzoic acid. Prof. Dr. Kobert found by experiments on animals that the muriate salt reduced the fever temperature considerably, and exerted no harmful effect. Dr. Unverricht hereupon employed the preparation in general practice, administering in doses of four to eight grains, but found the effect very unreliable, and accompanied by such unpleasant side-effects that all hope of employing orthin as an antipyretic was abandoned. It was then tried for analgesic properties, and by virtue of its reducing effect in psoriasis, but no advantages could be established over other similar remedies. Both Dr. Kobert and Dr. Unverricht combine in cautioning against further use of orthin.—*Notes on New Remedies*.

THE DISPENSING OF DIGITALIN.—The Paris correspondent of the Chemist and Druggist reports on a discussion on digitalin, recently held at a meeting of the Paris Société de Pharmacie, as follows:

M. Petit called attention to the vexed question of digitalin, or rather digitalins. As regards crystallized digitalin there is no difficulty when it is prescribed as such. The dose is one tenth of a milligram, and it makes but little difference whether Nativelle's or the German crystalline principle (by them called "digitoxin") or any other be employed. But the trouble is with amorphous digitalins. According to law, it is this sort that should be dispensed when no remark is made by the prescriber, and the preparations offered in the market as amorphous digitalins are exceedingly variable in strength. Some, such as Codex article, which are completely soluble in chloro-

form, are considered by good authorities nearly equal to the crystallized principle; but others must be much weaker, since they are taken in 1-mg. doses, which would be sure death with the pure product. As to the German sorts offered, they are of all varieties and prices, from less than one franc or three francs a gram, not to speak of the so-called digitoxin. In consequence of this great variation, M. Petit moved that a commission be appointed on the question, so as to arrive at some agreement in regard to uniform practice in dispensing digitalin. The motion was unanimously concurred in, and MM. Petit, Marty, Wurtz, and Delpech appointed a committee to consider the matter and report.—*American Druggist*.

THE health of Constantinople has, for many months past, been below its average standard. The sanitary appliances introduced in the construction of the houses appear to be deplorably imperfect, and their wretched arrangements are not assisted by an efficient supply of water. As regards external drainage, Constantinople is finely situated, but there are many quarters where the gradient of the sewers is too slight to insure a rapid outflow.

CHIAN TURPENTINE.—Since the introduction of the above remedy I have been using more or less, according to the indications for the same. Recently I had occasion to prescribe the pills, and after the patient had been taking them a few days he made this remark, "that he thought the last pills were doing him no good, for the reason that they passed through in about the same condition as they were taken." On investigation, I found he was right; the pills were perhaps altered in shape, but otherwise appeared the same. At that time another patient who was taking the same remedy was under the same watchfulness and care as regards the evacuations from the bowels, and the same condition of things found; that the pills were recovered just as they were taken. I have myself put one of the pills into my mouth, and chewed it for from a half to three quarters of an hour without making any impression on it as far as size was concerned. In two of these cases the pills were made by

two of our leading pharmacists; they were, in the three instances tested, freshly made; nothing used in either case as an excipient, only a little dry flowers of sulphur to give a little firmer consistency.—*B. R. Symonds, M. D., Boston Med. and Surg. Journal.*

AN EPIDEMIC OF JAUNDICE.—Queens County and Charlottetown, P. E. I., have been visited by an epidemic of jaundice. Children were largely affected, although no condition of age, sex, or position was discoverable as conferring immunity against it. In adults the complaint was at times limited to the reported feeling of "biliousness," while two, three, or four of the children of the family would be distinctly marked with jaundice. In this and other peculiarities, the disease strongly suggests that a bacterial causation underlies the epidemic prevalence of jaundice.—*Journal Amer. Med. Association.*

WE are happy to chronicle the fair and unprejudiced report of the President of the Massachusetts Society for the Prevention of Cruelty to Animals, regarding the rumors which have been current recently, that Clark University, of Worcester, has violated the State laws by the vivisection of animals. President Angell says that anesthetics have been used in all instances, and the animals have been dispatched before they returned to consciousness. He approves of the work done at the university in this line, as vivisection is practiced not to establish the truth of old principles, but to add new facts to science.—*Boston Med. and Surg. Journal.*

THE National Academy of Sciences, in Washington, on April 18th elected as members of the Academy, George L. Goodale, Professor of Botany in Harvard College, Russell H. Chittenden, Professor of Chemistry in Yale College, Richard M. Smith, Professor of Political Economy in Columbia College, New York, and General Thomas L. Casey, Chief of Engineers, U. S. A. One vacancy remains unfilled, it having been found impossible to agree upon the persons most worthy to be honored.

DR. H. P. BOWDITCH, Dean of the Harvard Medical School, has lectured on "Composite Photography," before the Emperor of Germany, who is said to have been pleased by the composites exhibited of American physicians.

THE new Marion-Sims School of Medicine will erect a \$40,000 building in St. Louis, as as soon as a site has been selected.

SPECIAL NOTICES.

ABSTRACT OF REPORT ON OBSTETRICS AND GYNECOLOGY.—The treatment of abortion by E. S. M'Kee, M. D., Cincinnati, Ohio, is a subject of great importance, because it is one which is always with us, and the careful handling of the case often saves the patient from long and troublesome, as well as dangerous, sickness. Of great interest to me is a case which happened recently in my practice. I was called to see a woman who was seven months pregnant with her third child. She was suffering from pains, and seemed to be on the verge of aborting. I prescribed dioviburnia, made by the Dios Chemical Company, of St. Louis, in doses of a dessertspoonful four times a day. The threatened abortion passed off and I was not again sent for until a month elapsed, when I found her in the same condition as before, suffering very much pain. She begged me for the medicine which had done her so much good on a former occasion, which I gave her in the same dose, with a like result. On delivering her at full term of a fine boy, she volunteered the confession that she had, on both occasions mentioned, made desperate efforts to produce an abortion, and only sent for me when her sufferings became unbearable. I have also had marked results from this remedy in other cases, but the one here presented is of the most interest. I shall continue its use further.

CHRONIC SYPHILITIC SALIVATION.—A. W. Furber, M. D., L. R. C. S., and L. D. S., says: I have for a long time had a gentleman—patient under my care for disease of the teeth, and although my operations progressed favorably, I had many difficulties to contend with. The whole of my patient's teeth appeared to have a syphilitic taint, and with increased flow of saliva, amounting to chronic salivation. These were not the only troubles I had to surmount; but that which retarded my work most was the repeated recurrence of syphilitic ulcers of the sulcus and gums generally, which, though not painful to my patient, was still a source of considerable discomfort, and militated greatly against the success of my operations. Iodine having come under my notice, I was inclined to give it a trial, and with the addition of a small proportion of liq. hydrarg. bi-chlor., taken daily before meals for a time—also used occasionally as a mouth-wash—the salivation became normal, the mucous membrane assumed a more healthy state, and the teeth generally looked like coming back to their original color.

80 Fortress Road, London, N. W.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., MAY 24, 1890.

No. 11.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

PIONEER MEDICAL MEN AND TIMES IN KENTUCKY.*

BY JOHN A. OUCHTERLONY, A. M., M. D.

Professor of Principles and Practice of Medicine and Clinical Medicine in the Medical Department of the University of Louisville; President of the State Medical Society of Kentucky for the Year 1890.

Haec olim meminisse juvabit.—Virgil.

The medical profession of Kentucky, composed of thousands of intelligent, learned, and influential men, like every other great power, had its "day of small things." This was in pioneer times. What immense progress has been made since then! But progress means force, living force—and many of the medical men of those days were very much alive, and of great vigor, both physically and intellectually.

The historians of Kentucky have evidently felt but little interest in the medical history of the Commonwealth, and have in a great measure ignored the medical men, whose genius and achievements have contributed in no small degree to the advance of civilization.

The records of pioneer medical men are but few and imperfect, widely scattered and difficult of access.

It seemed to me to be not unworthy of this occasion to offer what materials I have been enabled to collect, as a contribution to the history of THE PIONEER MEDICAL MEN OF KENTUCKY. I am well aware how imperfectly I have executed the work, yet it has been a labor

of love to me, and I feel sure that it will appeal to the elivalry and patriotism for which our State is justly famed.

The facts which I have woven together have been diligently and laboriously searched for, yet the results are often but fragmentary and disjointed.

How little we know of those bold, adventurous spirits who braved danger from a hundred sources, traversing mountains and rivers, and penetrating into the dense forests of the "dark and bloody ground!" There they took up their dwelling place, they helped to establish a new Commonwealth and to create a new civilization, which, though not faultless, was yet distinctive, indigenous to the soil, and characteristic of a noble, generous, and high-spirited people.

How little can we ever know of these our professional ancestors, who laid the foundation in the wilderness of the professional edifice which we regard with pride, and of which we have a right to be proud!

Inscribed upon its walls we read the names of old Transylvania and of the great medical schools which have sprung into existence in more recent times. There sparkles with unfading brilliancy the names of those great men who have shed lustre on Kentucky Medicine, who have made the State famous in every civilized land upon the globe.

But many noble workers in our profession during the pioneer days of Kentucky have gone down to their graves, if not unwept, yet unknown and unsung.

It has been my aim in this address to recall to the memory of my professional brethren the names and deeds of many already half forgotten, to rescue from the dark night of oblivion some who are entitled to remembrance and an honorable place in the history of Kentucky Medicine. In order to confine this ad-

*An address delivered before the State Medical Society of Kentucky, May 14, 1890.

dress within reasonable limits I have been obliged to omit some of the materials at my disposal.

From the earliest dawn of civilization in Kentucky the medical profession rose to prominence, not only on account of the great benefits conferred by it upon the Commonwealth, but also on account of the high character and great intellectual gifts of many of its members.

The medical man of pioneer days combined the two-fold avocation of hunter and physician. His professional journeys from one settlement or station to another were more like military expeditions into a hostile country than the missions of mercy of a practitioner of the healing art. His trusty rifle slung across his shoulder was as necessary a part of his equipment as his saddle-bags, and was likely to be brought into requisition at any moment. The Indian incursions were of frequent occurrence, and small bands or single savages were often lurking in the forests, even in times of comparative tranquility. These Indian depredations continued even after Kentucky had separated from Virginia and had been admitted to the Union as a State. They did not cease until 1793, and on the first of April of that year Morgan's Station on Slate Creek, seven miles east of Mount Sterling, was captured, and nineteen women and children were taken prisoners.

The dress of the early settlers was of primitive simplicity, and we may assume that the pioneer physicians conformed to usage, dictated alike by necessity and convenience. The hunting shirt was universally worn. It was usually made of linsey or coarse linen, sometimes of dressed deer skins. The bosom of this dress was sewed up as a wallet to hold a piece of bread, cakes, tow for wiping the barrel of the rifle, etc. The belt answered several purposes besides that of holding the dress together. To the right was suspended the tomakawk, to the left the scalping knife in its sheath, and it is to be supposed that the pioneer doctor was an adept in its use. The skirt and jacket were of the common fashion. A pair of drawers or breeches and leggins were the dress of the thighs and legs, and a pair of moccasins answered for the feet much better than shoes; these were made of dressed deer

skin, generally of a single piece, with a gathering seam along the top of the foot and another from the bottom of the heel, without gathers, as high as the ankle joint. Flaps were left on each side to reach some distance up the leg. Hats were made of the native fur; the buffalo wool was frequently employed in the composition of cloth, as was also the bark of the wild nettle.

As a rule, up to the year 1820 the clothing of the people throughout the State was the direct product of their own farms, and had been spun, woven, and fashioned by the females of the household.

In the beginning medical men were but few, and the need of them not so great as in our "piping times of peace," when wealth and luxury and an artificial mode of life have sapped strength and lowered vitality. Next to the courage and fortitude and the spirit of generous self-sacrifice of her noble sons, there is nothing more striking to the student of the early history of Kentucky than their marvelous recuperative powers. Recovery often followed severe wounds and serious injuries under circumstances which we to-day would consider most adverse. True, they were a hardy and superior race; they lived temperately; a large portion of their time was spent in active exercise in the open air; but of medical and surgical treatment generally but little, and often none at all, was received. Surgical instruments and appliances were hard to get, and often enough the surgeon had to improvise them upon emergency. For medicine they relied upon the flora of their region. The experience of the Indians in the use of medicinal herbs was made available by the observations of those who had been prisoners among them. But soon, with the settlement of regular physicians at the various stations, more enlightened modes of practice were substituted for the ignorant usage of the aborigines.

THE FIRST EXPLORER A PHYSICIAN.

The earliest recorded exploration of Kentucky by the white man was made in 1747, or, according to some accounts, in 1750. It is interesting to note that the noble adventurer who bravely plunged into that pathless wilder-

ness was a *medical* man. Dr. Thomas Walker, the leader of a small party crossed the Alleghany and the Cumberland Mountains, discovered Cumberland Gap—through which he entered Kentucky—and the Cumberland River, and these names by which they are now known were first given by him. After having passed through Cumberland Gap he pursued the route afterward celebrated as the Wilderness, until he arrived at the Hazelpatch, in now Laurel County. He then turned northward to the Kentucky River, which he called Louisa River; followed down its broken and hilly margin some distance without finding much level land. Becoming dissatisfied, he turned up one of its branches to its head and crossed over the mountains to New River, in Virginia, at the place now called Walker's Meadows.

The beautiful scenery, the fertile soil, and salubrious climate must have made a favorable impression upon this medical explorer, whose professional knowledge enabled him to form a correct estimate of the character of this new country which he traversed.

Unless historians have erred, he returned to Kentucky in 1750. Isaac Shelby, the first Governor of the State, stated that in 1770 he was at Yellow Creek, a mile or two from Cumberland Mountain, in company with Dr. Walker and others, when Walker told him of his having been upon that spot twenty years before, and "yonder beech tree contains the record of it; Ambrose (a member of his party) marked his name and the year upon it, and you will find it there now." Col. Shelby examined the tree and found upon it in large, legible characters, "A. Powell, 1750."

Whatever differences of opinion may exist as to the visit of Dr. Walker to Kentucky, whether in 1747 or 1750, or both, it is certain that he made another expedition in 1758, and penetrated as far as Dick's River. He became permanently interested in this great and beautiful country which his enterprise and daring had helped to make known to the white race. He was born in King and Queen County, Virginia, on the 15th day of January, 1715. He was the chief commissioner for his State in running the boundary line between Virginia and North Carolina. (Collins, 2 vol. 759.)

At the age of twenty-six years he married a young widow six years younger than himself, Mrs. Nicholas Meriwether, whose maiden name was Mildred Thornton. She was a cousin of George Washington, whose elder brother, Samuel, had married one of her near relatives; and in this way Dr. Thomas Walker became closely and doubly connected with the Washington family. The mother of his children died in 1778, and he married some years afterward a cousin of his first wife, who was also a near relative of Washington. To this second wife Washington makes reference in a letter to Dr. Walker, bearing date the 10th of April, 1784, in which he says: "It is unnecessary to give you assurance of the pleasure I should feel in seeing you and my cousin here at this retreat (Mount Vernon) from all my public employments."

It has been doubted whether Dr. Walker was a member of the medical profession. In the index to Professor Shaler's "Kentucky" he is referred to as the *Reverend* Thomas Walker. It is beyond question that he was a physician and not a clergyman. It is probable that he had profited by whatever scant facilities were offered in his youth at the old college of William and Mary for the study of medicine, but, however this may be, two memoranda show that he compounded "electuaries," and what he describes as "a methredate to make a medicine for mad dogs." A more conclusive proof of his being a physician is the fact that in June, July, and August, 1757, he made repeated professional visits to Col. Peter Jefferson, and stood by his bedside when he died on the 17th of August of that year.

His was an active, a useful, and an honorable career. His declining years were cheered by the happiness and prosperity of his many children. The eldest, who had been on the staff of Washington, was a senator, the youngest was a member of the House of Representatives of the United States.

At his much loved home, Castle Hill, Albemarle County, Virginia, he had built a house in 1765 which stands to-day in excellent preservation. It is one of the few buildings still remaining on the soil of Virginia which are older than the beginning of the War of Independ-

ence. In this home, the birth-place of his twelve children, the old pioneer physician, near the end of his eightieth year, on the 9th of November, 1794, closed his eyes on earthly scenes.

A daughter of Dr. Thomas Walker married Joshua Fry, the celebrated educator, from which union has descended a numerous and distinguished posterity.

THE FIRST PRACTICING PHYSICIAN.

In the spring of 1775 a party of Catholic emigrants from Maryland settled at Harrodsburg (or Harrod's Station, as it was then called), at that time the only place in Kentucky, except Boonesborough and perhaps Logan's Station, where emigrants could enjoy any degree of security from the attacks of Indians. Among those composing this party were Dr. George Hartt and William Coomes and his wife, and they are among the first white people who settled in Kentucky.

Dr. Geo. Hartt was unquestionably the first physician who practiced medicine in this State. He was the founder of regular medicine in Kentucky. He was born in Ireland, but I have not been able to ascertain when he was born, when he came to this country, or where he studied his profession. He lived and practiced medicine in Harrod's town for some years, during which time the inhabitants sustained the celebrated siege (1777) of Indians under their chief, Blackfish.

In 1780 we find Dr. Hartt practicing in Louisville, a fact not hitherto noticed by former historians, but of which there is incontrovertible evidence in the form of a bill to a Mr. Clews for medical services rendered his family by Dr. Hartt. The original bill is in the valuable collection of manuscripts belonging to Col. R. T. Durrett. It reads as follows:

GEO. CLEWS TO DR. GEO. HARTT:	
1780.	
May 23d. 8 doses calomel.....	\$240
4 blistering plasters for your	
child.....	240
	<hr/>
	\$480

It is not known how long he remained in Louisville, but he either went back to Harrodsburg, and from that place removed to Bardstown, Nelson County, or else he removed di-

rectly from Louisville to Bardstown about the year 1785 or 1786. In the latter place he lived and practiced his profession for many years, a useful and honored member of the community. On the 12th of July, 1802, he was still living, for on that day he signed a deed, transferring a part of his farm, a mile from Bardstown, to the Rev. Stephen Theodore Badin. He gave a tract of land for a Catholic cemetery, and tradition has it that he was the first to be buried in it.

THE FIRST SURGICAL OPERATOR.

The first surgical operation in Kentucky, or by a Kentuckian, of which a record has been found so far, was not performed by a professional surgeon, but by a layman, under such peculiar circumstances and with such novel instruments as to entitle it to a mention in this place. The volume in which it is related is both rare and curious. The only copy of it I have ever seen, perhaps the only one in existence, is in the library of my friend, Col. R. T. Durrett, the scholarly president of the Filson Club. It is entitled,

"An Account of the Remarkable Occurrences in the Life and Travels of Col. James Smith during his captivity with the Indians, during the years 1755, '56, '57, '58, and '59, to which is added a brief account of some very uncommon occurrences which transpired after his release from captivity, as well as of the different campaigns carried on against the Indians to the westward of Fort Pitt since the year 1755 to the present date. Lexington. Printed by John Bradford, 1799."

It was written by Col. Smith himself. The author at that time was still alive, and a resident of Bourbon County.

About the last of June, 1766, he had set out upon an expedition to explore certain rich lands lying between the Ohio and Cherokee rivers. Having arrived at the mouth of the Tennessee River, his fellow travelers concluded to push on to the Illinois and see some more of the lands to the west. Col. Smith would not accompany them, as his wife would be disturbed by his long absence and think he had been killed by the Indians. A friend of his having lent him his mulatto boy, he set off through the

wilderness. The description of the injury he met with and of the surgical operation undertaken for its relief I shall give in his own words :

"About eight days after I left my company at the mouth of the Tennessee, on my journey eastward, I got a cane stab in my foot, which occasioned my leg to swell, and I suffered much pain. I was now in a dreadful situation, far from any of the human species excepting Black Jamie or the savages, and I knew not when I might meet with them; my ease appeared desperate, and I thought something must be done. All the surgical instruments I had were a knife, a moccasin awl, and a pair of bullet-moulds. With these I determined to draw the snag from my foot if possible. I stuck the awl into the skin, and with the knife I cut the flesh away from around the cane, and then I commanded the mulatto fellow to catch it with the bullet-moulds and pull it out, which he did. When I saw it, it seemed a shocking thing to be in any person's foot; it will therefore be supposed that I was very glad to have it out. The black fellow attended upon me and obeyed my directions faithfully. I ordered him to search for Indian medicine, and told him to get me a quantity of bark from the root of a lynn tree, which I made him beat on a stone with a tomahawk, and boil it in a kettle, and with the ooze I bathed my foot and leg. What remained when I had finished bathing I boiled to a jelly and made poultices thereof. As I had no rags, I made use of the green moss that grows upon logs, and wrapped it around with elm bark; by this means, simple as it may seem, the swelling and inflammation in a great measure abated."

The wound must have healed tardily, for many weeks elapsed before he could even walk slowly. His description of life in the wilderness, and how he procured shelter and sustained existence, is very interesting, but would be out of place in this address.

The operation so graphically described was peculiar in this, that it was both conceived and executed by the patient himself.

THE FIRST FEMALE PHYSICIAN.

In the company of emigrants with whom Dr. Geo. Hartt came to Kentucky were also Wm.

Coomes and his wife, Frances. The husband was brave and intrepid; took part in many fights with the Indians, and had numerous adventures and hair-breadth escapes. He reached a high age, and was much respected and honored; but it is especially his wife who claims attention in connection with pioneer Medicine in Kentucky. She was a woman of remarkably vigorous intellect, great originality and fertility of resource, and of strong and noble character. She certainly was the first female who ever practiced medicine in Kentucky, and according to some she was the first of either sex to exercise the beneficent functions of the healing art in our State. She was physician, surgeon, and obstetrician, and her fame and practice extended far and wide, even attracting patients from remote settlements, not only in Kentucky, but in adjoining States.

Under whatever circumstances she might be placed, she was ever actively engaged in useful occupations tending to the comfort and welfare of the people around her.

This excellent couple came originally from Charles County, Maryland, whence they had removed to the south branch of the Potomac River in Virginia. On the way to Harrod's Station the party camped for some weeks at Drennon's Lick, in the neighborhood of the present city of Frankfort.

Here Mrs. Coomes, aided by those of the party not engaged in hunting, employed herself in making salt; the first time, perhaps, that this article was manufactured in the State.

According to a tradition in her family, she was the first woman who made bread in Kentucky.

She brought with her from Maryland a supply of ealomel, which she administered very freely when she thought it really needed; but ordinarily she was quite chary in dispensing it, owing to its being exceedingly expensive. As a substitute for this valuable medicine, and as a purgative, she would make a sort of extract of the bark of white walnut, by boiling the bark down to a syrupy mass, which was then made into pills. In those troublous times, when gunshot wounds from the rifles of hostile Indians were almost an every-day occurrence, she often cut for and extracted bullets. Among the

more notable surgical achievements, the record of which has come down to our day, there are two especially worthy of mention as showing either a very sound, clear, and practical judgment, or a wonderfully accurate surgical instinct. The first case occurred in the person of one of her grandchildren, who was born with the feet turned up against its shin bones. This was evidently a case of congenital talipes calcaneus, the rarest of all the different forms of club foot, and was treated according to correct surgical principles by this backwoods surgeon of the eighteenth century, not only with brilliant success, but the cure was also effected with remarkable rapidity. The means adopted consisted of a series of hickory splints made by herself, of appropriate shape and size, which were kept in position with bandages, the dressing being changed every few days to suit the progress of the case.

The second case was a man who had come from Virginia to consult this celebrated woman doctor. He had a chronic ulcer somewhere on the lower extremities, constituting a severe lesion, for which he had applied in vain to many physicians.

Mrs. Coomes having critically examined the patient, informed him that she could cure him, but that the treatment would necessarily be severe; if he thought he could endure the suffering it entailed she would be willing to undertake the management of his case. The patient having expressed his willingness to undergo whatever suffering might be necessary in order to effect a cure of his disease, we may assume that her operative procedures were begun without delay. Her operating table was rather primitive and of rude construction, but not the less effective. It was made out of a piece of timber hewn specially for her purpose, and so constructed as to enable her to strap the patient down upon it, with a view to obtain perfect immobility, or as near to it as possible. The patient having been firmly secured in a suitable position, the operator proceeded to make a dam of clay around the diseased locality, in order to protect the surrounding healthy tissues, and then applied a powerful escharotic by pouring hot boiling lard over the affected surface. Doubtless it was a rude procedure,

but it was the best circumstances would permit; and after all, the principle involved was sound, and the brilliancy of the cure was a satisfactory demonstration of the merit of the remedy.

Kentucky, so justly proud of the beauty and virtue of its women, may thus claim to have had the first female physician and surgeon on the continent. What though she never saw the inside of a medical college! What though the degree of Doctor of Medicine had never been conferred on her! In those days there were few who had; yet her work was good, her success undoubted, and her life was noble. Among her posterity there is a physician, a distinguished member of this Society (Dr. Martin F. Coomes, of Louisville), who may point with pride to this old lady as one of his ancestors not only of blood, but by profession.

THE FIRST HISTORY OF LOUISVILLE.

In 1819 the first history of Louisville appeared, and in the opinion of Col. Durrett, who is an acknowledged authority on this subject, it is the earliest book printed in this city still in existence. The publisher was S. Penn, Jr. The author of this remarkable work was a physician, Dr. H. McMurtrie. He was the son of a wealthy Scotch merchant of Philadelphia, and was born in that city in 1793. He was educated at William and Mary College, Virginia. After leaving this college he studied Medicine, and received the degree of Doctor of Medicine at the University of Pennsylvania.

During the war of 1812 he was surgeon to the American ship *Penrose*, and was captured and taken to the Isle of France, where he was detained for two years. After having been released from prison he returned to Philadelphia and married Miss Ann Newnham, the daughter of an English clergyman.

Shortly after his marriage he came with his wife to the Falls of the Ohio. The climate proving unfavorable to his health, he did not take up his permanent residence. But while here he made good use of his time, and wrote and published the able and erudite work which must forever connect his name and memory with our beautiful city. The elder Yandell has

given a rather full review and very fair criticism of Dr. McMurtrie's book. He shows that in the light of modern geological knowledge the author was over credulous, and says that his account of the organic remains at the Falls of the Ohio is "purely fanciful." But the review admits that he wrote with great intelligence about disease.

We owe him a debt of gratitude for his warm appeal to the authorities of Louisville in behalf of a hospital. At the time he wrote, not a hut or shelter of any kind was appointed by the town for the homeless victims of disease.

Perhaps it was owing to his philanthropic exertions that the present city hospital was founded in February, 1818.

Dr. McMurtrie lived until 1865, and died in Philadelphia, where for many years he had led a useful, honored, and scholarly life.

It is pleasant to note that a descendant of the first historian of Louisville is not only a citizen of Kentucky, but a member and an ex-president of this Society. I allude to my distinguished friend, Dr. Louis S. McMurtry, who is present at this meeting.

THE FIRST MEDICAL BOOK.

The first medical book ever published in Kentucky, so far as I have been able to learn, was entitled "American Medical Guide for the Use of Families." It was written by Dr. Thos. W. Ruble. It was printed in 1810 by E. Harris, in Richmond, Ky. The author appears to have been a regular physician, and his book fairly represents the general medical knowledge of the day. Under the then prevailing circumstances I doubt not that the work was effective of much good among the sparsely settled population, where physicians were not so numerous as now, and at times not accessible. It contains a quite full account of the *Materia Medica*, and gives a synopsis of the practice of Medicine and Surgery. Toward the close of the volume is a rather brief chapter on the Anatomy of the Human Body. But nothing is said of Physiology. The word is not even mentioned, probably for the reason that the science of Physiology had hardly come into existence at that time.

THE FIRST MEDICAL SOCIETY.

On the 24th of February, 1819, the first medical society in Louisville and in the State was formed, and a scale of fees was adopted. The founders were W. C. Galt, W. H. Hughes, H. Oldham, Thos. Booth, N. Ragland, G. W. Smith, W. M. Taylor, Richard Ferguson, John Robertson, Daniel Wilson, W. H. Allen, W. E. M. Burrell, J. Moser, J. C. Johnson, and J. L. Murray. They addressed a card to the Public Advertiser, a weekly newspaper of that date. This card was signed by all the founders, and set forth that they had formed themselves into an association for the advancement of professional science, and for the purpose of graduating the scale of honorable remuneration proportionately to the advance which had taken place in every item of human subsistence.

Among these Dr. Ferguson must be specially noted as having amputated the leg of Gen. George Rogers Clarke.

It is to be regretted that this scale of fees has not come down to us. Doubtless they were very small in proportion to the professional fees of our time, yet the physicians of those early days were not altogether forgetful of their duty to their families and their profession. In the valuable collection of manuscripts belonging to my distinguished friend, Col. R. T. Durrett, is the original bill presented by Dr. Hartt to a Mr. Clews in the year 1780, in which he charges \$240 for eight doses of calomel, and another \$240 for four blistering plasters. It is pleasant to record that the bill appears to have been received without complaint, and several credits inscribed upon its face testify to a willingness to liquidate the debt.

EARLY SURGICAL OPERATIONS.

Doubtless many formidable and great operations were performed by the early physicians and surgeons of Kentucky which have never been reported, and the memory of which has been lost. The following which have been recorded seem to deserve notice in this place.

The first occurred in the practice of Daniel Caldwell, of Russellville, Kentucky, and was reported by him in the first volume of the *Transylvania Journal of Medicine* as a case of "Excision of the Pancreas." It is thus de-

scribed: In an affray between two negro men belonging to Judge Bibb, in the fall of 1816, one was wounded with a large knife in the left side between the last true and the first false rib. Through the wound an oblong body between three and four inches in length protruded, and not having been returned for four days, became in part gangrenous. The sphacelated portion of the organ was excised, and the rest restored to its place. The patient recovered and felt no inconvenience from the mutilation of the viscus, which, from the site of the injury and the appearance of the organ, was doubtless the spleen, and not the pancreas, as Dr. Caldwell conjectures.

In the same year in which Dr. Caldwell reported the foregoing case, Dr. Powell, then of Newport, published one of similar character. A man was wounded between the second and third false ribs four inches from the spine, the knife with which the wound was inflicted passing down round the body into the cavity of the abdomen. A portion of the spleen with a slit in it protruded and could not be replaced. The next morning Dr. Powell encircled it with a strong tendon and amputated it close to the body. The patient was bled freely, and, notwithstanding a peritoneal inflammation, recovered in a fortnight. (*Am. Jour. Med. Science*, 1828, vol. 1, p. 481.)

QUACKS.

In this world where good and evil are so strangely intermingled, and where the tares and the wheat grow side by side, and the virtuous and the wicked have to dwell together, the bad is correlative with the good, and an account of the former almost necessitates some mention of the latter. It would then seem not out of place to say a few words about those mal-odorous excrescences upon the body medical—the quacks.

These creatures began to infest Kentucky as soon as the population was large enough and money had become abundant enough for them to reap a profitable harvest.

A noted specimen of his class flourished in the State during the early part of this century. His name was Richard Carter; he was born in 1786, and wrote a book about himself, his

methods, and his medicines. It was first published in Frankfort in 1813 by Gerard & Berry, printers to the Commonwealth, and seems to have had a considerable run, for it passed through two editions, the second of which was printed at Versailles in 1825. The contents, besides the author's life, are made up of a mass of arrogant nonsense and falsehood, interspersed with an abundance of obscene doggerel. The following is a fair sample of Carter's therapeutics:

“FOR THE GOUT, RHEUMATICS, CRAMPS, INFIRMITIES OF THE SINEWS, JOINTS, ETC.—Take a young fat dog and kill him, scald and clean him as you would a pig; then extract his guts through a hole previously made in his side, and substitute in place thereof two handfuls of nettles, two ounces of brimstone, one dozen hen eggs, four ounces of turpentine, a handful of tanzy, a pint of red fishing worms, and about three fourths of a pound of tobacco cut up fine. Mix all these ingredients well together before depositing in the dog's belly, and then sew up the whole. Then roast him well before a hot fire, save the oil, anoint the joints and weak parts before the fire, as hot as you can bear it, etc.”

Toward the close of the volume he gives a list of his students which is somewhat amusing:

“A LIST OF MY STUDENTS AND THEIR ACQUIREMENTS.—Andrew Hood and John Wolf-scale were my two first students; they were attentive and improved considerably in my mode of practice.

“Henry Rogers another; he stayed but a short time with me and received but little insight.

“William Cope another, who made considerable improvement in practice.

“Cantly Wallace; he made tolerable improvement for the time.

“Wm. Renfrow, for his chance made good improvement.

“Francis C. Brady was another student, and an Irishman. I shall neither say good nor harm of him; his works will show for themselves.

“Isaac Westerfield is my last student; he is a young man of good mother wit, of a sprightly genius, and well read. He has been with me between three and four months, and has im-

proved as much in that time as any other of my students did in twelve months. To this young man I mean to reveal my whole secret.

"These are all the students that I ever had or ever mean to have, except my children."

The long list of distinguished medical men of early times in Kentucky may appropriately be headed with the name of

DR. FREDERIC RIDGELY,

who was descended of parents of the highest respectability, and was born May 25, 1757, on Elk Ridge, Ann Arundel County, Maryland. Having pursued his collegiate studies at the academy of Newark, Delaware, at that time the most celebrated school in that part of the country, he entered upon the study of medicine with Dr. Philip Thomas, of Fredericktown, in the seventeenth year of his age. At the breaking out of the revolution he was, though only nineteen years of age, appointed surgeon to a corps of riflemen, and with his command marched to the north, arriving at Boston only a few days after the battle of Bunker Hill. During the investment of the city which followed he held the position of hospital physician, and owing to the prevalence of sickness among the troops his duties were most arduous. Throughout the trying year of 1776 he served with the army of Gen. Washington. In 1777 he was appointed surgeon to the fourth Maryland regiment of regulars, and served in this capacity at the descent on Staten Island and at the battles of White Marsh, Brandywine, and Germantown.

The British, having been forced to evacuate Philadelphia in 1778, he resigned his commission in the army in order to complete his medical studies by attending lectures at the Philadelphia Medical College. His acquaintance with Dr. Rush, who was Physician General of the hospitals, became more intimate in their new relation as teacher and pupil, and ripened into a friendship that lasted through life, and was maintained by an active correspondence.

His sojourn in Philadelphia was cut short before he could obtain his degree of M. D. Early in 1779 he was appointed surgeon to a vessel about to sail with letters of marque and reprisal from that port.

When off the coast of Virginia the ship fell in with an enemy of superior strength, was chased into Chesapeake Bay, and after a severe engagement captured. As the American flag was lowered Ridgely leaped overboard and narrowly escaped being made a prisoner by swimming two miles to shore. An opportunity again offering, he re-entered the army, and continued in active service as a medical officer until the close of the war.

When peace had been restored he resigned and took up his residence in his native county, where he speedily built up a very extensive practice. But the promise of a larger field and perhaps also of a new and active life in the wilderness had some attraction for him, and induced him to emigrate to the West. In the year 1790 he settled in Lexington, Ky. In his new home he quickly won popular favor and esteem, while his attainments and extensive army experience secured for him a high position in his profession and a large practice.

Soon after his arrival in Kentucky he was again called to render military services, and took part in two expeditions against the Indians. In 1794 he was made Surgeon General to the army of Gen. Wayne. With the close of this campaign ended his military career, and thenceforth he devoted himself to the practice of medicine and surgery in Lexington.

So brilliant was his success and so wide his fame that patients came to him from the most remote settlements in the State.

In 1799 Dr. Ridgely was elected Professor in the Transylvania University, and the same year he delivered a course of lectures to a small class in that institution.

To him, therefore, belongs the honor of having introduced public medical teaching in Western America. He died on the 21st of November, 1824, in the sixty-fourth year of his age.

DR. JOHN MILTON HARNEY

was one of the early physicians of the State of whose life but a glimpse here and there can be discerned. But these glimpses are like sunlight shining forth through the clouds. He was born in Delaware on the 9th of March, 1784. His father was the son of Maj. Har-

ney, and an elder brother of the famous Gen. W. S. Harney, of the U. S. Army.

He probably received his medical education and degree at the University of Pennsylvania. Having emigrated to Kentucky, he engaged in the practice of his profession at Bardstown. In 1814 he married a daughter of the celebrated Judge John Rowan. This union, which was most happy, was severed by the untimely death of the lovely young wife in 1818. Harney was a poet of more than ordinary merit. Unfortunately but few of his poems have been preserved. Among these are "Echo" and the "Lover," a humorous and clever production; "A Fever Dream," and a short poem "On a Valued Friend." The Hon. Ben J. Webb in his history speaks of Dr. Harney as a physician of high standing, scholarly and accomplished.

The poetic temperament would seem to ill accord with the hard, unromantic labors and rough-and-tumble sort of life in a new country but recently redeemed from the wilderness, and yet Harney appears to have won the affection and esteem of the people, and enjoyed a full share of their confidence as a physician.

When but twenty-three years of age he wrote "Crystallina, a Fairy Tale," in six cantos, but it was not published until 1816. His sensitive mind was deeply wounded by the unfavorable criticism it evoked, and in spite of the kind and flattering notices which also fell to its lot the author caused his most ambitious effort to be suppressed.

Dr. Harney was a deeply religious man, and a devout and consistent Christian. He died at Bardstown on the 15th of January, 1825, at the early age of thirty-six years.

DR. WALTER BRASHEAR.

Among the most brilliant and distinguished of the early medical men of Kentucky Dr. Walter Brashear occupies a very conspicuous position. Though little known to the present generation, his name will live in the history of the medical profession of our State and of the world. He was the first American surgeon who amputated the thigh at the hip-joint. In an unpublished manuscript by Dr. L. P. Yandell, sr., to which I have had access through the courtesy of Dr. D. W. Yandell, it is remarked that

Dr. Brashear successfully executed this formidable operation in the year 1806, eighteen years before it was performed by Dr. Valentine Mott, of New York. It was done three years before Dr. McDowell performed his first ovariectomy, and in the same year that the great Dudley took his medical degree.

In the transactions of the Kentucky State Medical Society for the year 1852, Dr. S. D. Gross contributed a report on Kentucky surgery, in which he gives the following account of the operation:

The subject was a mulatto boy, seventeen years of age, belonging to St. Joseph College, at Bardstown. He had a fracture of the thigh, complicated with severe injury of the soft parts, and completely recovered, living in good health many years after.

Dr. Brashear had no precedent to guide him in his hazardous undertaking, for the cases of Larrey and other army surgeons of Europe had occurred only a short time before, and were then entirely unknown to the bold and adventurous backwoodsman. The operation was performed upon a very novel plan comprising two distinct steps. In the first, the thigh was removed about its middle in the ordinary manner, and in the second the remainder of the bone was separated from its muscular connection by a long incision on the outside of the limb, and disarticulated at the socket.

Considering the date of this performance, and the fact that Dr. Brashear was obliged to rely entirely upon his own resources, it justly challenges our admiration and gives us the most exalted opinion of the operator's ingenuity, judgment, and skill.

According to Dr. Yandell, the operation was performed in the presence of Dr. Burr Harrison and Dr. Goodtell, prominent physicians of Bardstown. No report of it was published either by Dr. Brashear or his friends, and for nearly half a century it lived only in tradition. It was one of many operations performed by him, which placed him in the front rank of Kentucky surgeons of that day. He was a lithotomist, and seems to have excelled in the management of fractures of the skull, for which he devised a set of trephining instruments esteemed by him much superior to those in common use.

Almost all we know of this remarkable man was gathered together by Dr. Gross. Yandell, in his sketch of Brashear, gives great credit to the industry and pains taken by this great surgeon in collecting materials for a biography of his predecessor by fifty years.

Dr. Brashear was born in Prince George County, Maryland, on the 11th day of January, 1776. When eight years old his father, Nacy Brashear, came with him to Kentucky and settled at Long Lick, near Shepherdsville, in a region of country possessing great interest at that period of our history, as furnishing most of the salt used in the early settlements.

He was a seventh son, and, as such, educated with reference to the medical profession. After getting the rudiments of an education to be acquired in the schools of his neighborhood, he was sent to Transylvania University, where he had ample advantages. He became a pupil of Dr. Frederick Ridgely in 1796, and two years later attended a course of lectures in the University of Pennsylvania. At the conclusion of the course he sailed for China in the ship *Jane*, to which he had been appointed surgeon.

While in China he amputated a woman's breast, which Dr. Gross suggests was probably the first operation of the kind among the Celestials. Learning from the Chinese the process by which ginseng is clarified, it occurred to him that he might make the ginseng trade more lucrative than Medicine, and he returned home to give himself up for a time to mercantile pursuits. But he was not successful in business. The war of 1812 came on, which ruined the commerce of the country, and he was compelled to betake himself again to his profession. He left Bardstown, where, as surgeon and trader, he had been at work a dozen years, operating when called upon, but giving his thoughts chiefly to commercial affairs.

In 1813 he settled in Lexington. The widespread epidemic of pneumonia by which the United States were visited early in the century reached Lexington in the winter of 1815 and 1816, and the hands of all the physicians were full; but no such accident was needed to

give Brashear business. With his talents and address and the reputation he had gained for professional skill, practice was sure to come to him soon. He rose to the head of his profession. In 1822 the honorary degree of Doctor of Medicine was conferred upon him by the Transylvania University.

But his was a restless spirit, and the desire for mercantile success seems to have had more weight with him than professional fame and honors.

In 1822 he all at once gave up his lucrative practice in Lexington and removed with his family to St. Mary's Parish, Louisiana. Here he devoted himself to planting, practicing only among his neighbors and particular friends, and then gratuitously. He was elected to the United States Senate from Louisiana, and according to the Yandell manuscript his original powers of mind, his wide intelligence, and his elevated moral character gave him weight and consideration in that grave body. He was a man of great versatility; unfortunately the facility with which he could turn his great powers to account in any and every department seems to have engendered a disposition to change from one thing to another, and he seemed to have lacked firmness or purpose and that unswerving perseverance which is necessary to the highest success in any walk in life. Whether physician or merchant, naturalist or legislator, he was both respectable and respected, and would have achieved distinction anywhere had he but remained faithful to any one of his various avocations: for, as Dr. Gross said of him, "Nature had evidently designed him for a great man."

While a resident of Lexington a warm friendship sprang up between Brashear and Henry Clay, which was renewed when he went to the Senate. The Yandell manuscript mentions that his house was the home of the great Kentuckian whenever he visited the South for his health, as he was often compelled to do. The following anecdote, from the *New Orleans Medical Journal* for July, 1845, recalls them both in pleasant relation to one another:

"During the winter of 1843-44, when the Hon. Henry Clay was on a visit to New Orleans, some twenty-five or thirty physicians had

the pleasure of spending the evening with him at the house of a medical friend. While at table one of the company proposed the health of the venerable Dr. Brashear, 'the first and only physician of Louisiana who has successfully performed amputation at the hip joint.' Mr. Clay, who was sitting by the side of Dr. Brashear, with characteristic good humor immediately remarked, 'He has you on the hip, doctor,' to the great amusement of Dr. Brashear and the rest of the company."

A HEROIC PHYSICIAN.

In the early history of Kentucky, thrilling adventures and exhibitions of great courage and daring were quite frequent; nevertheless the following seems to merit mention in this place:

The most interesting feature of the battle of the river Thames has always been the death of the great Tecumseh, but to medical men this battle is invested with a degree of interest far beyond that which might attach to the death of any rude savage chieftain, even though endowed with unusual qualities as a warrior and as a chief. It was the scene of an exploit rivaling the famous charge of the Six Hundred, and among the brave men who won honor and fame in that battle was one who belonged to our noble profession.

This battle was fought on the 7th of November, 1812. Col. R. M. Johnson, who has been thought by many to have killed the great chief, was ordered to lead a forlorn hope of twenty Kentuckians, in order to unmask an ambuscade of Indians and divert them from the remainder of his troops. The command was given by Col. Johnson to his old friend Col. William Whitley, who thus addressed his Spartan band: "Boys, we have been selected to second our colonel in the charge; act well your parts, recollect the watch-word, Victory or Death." Among these lion-hearted men was a physician, Dr. Theobald, of Lexington, who, though a non-combatant, had volunteered to share the danger with his comrades.

So fierce was the fight of the Indians that after a few minutes the only one of the forlorn hope left on horseback beside Col. Johnson was Dr. Theobald. The others were either

killed, wounded, or had their horses shot from under them.

Out of the twenty who went into the fight fifteen were killed in the charge or died of wounds. It is gratifying to note that Dr. Theobald escaped unhurt.

I have thus briefly sketched scenes of early pioneer life and the lives of pioneer medical men. But few names have been mentioned, and I am well aware how scant and unsatisfactory is the information which I have been able to give. Nevertheless it is a contribution to the early medical history of our State which I hope has not proven unacceptable to my brethren. Before closing I must express my gratitude for important assistance accorded me by Col. R. T. Durrett, who placed at my disposal his vast library, so rich in works and documents bearing upon the history of Kentucky. I also desire to acknowledge the important aid I derived from the unpublished manuscript by the late Dr. Lunsford P. Yandell, Sr. It was placed in my hands by my friend, Dr. D. W. Yandell, with the permission to make use of whatever I could find in it at all helpful to my purpose. I have freely availed myself of this permission. I can not close this address without offering a tribute to the learning, the industry, the painstaking accuracy of this distinguished physician, scientist, and historian. Though he died at a ripe old age, his death came all too soon.

To the illustrious Gross I am also indebted for biographical material. It was he who first gave an impetus to the study of medical history, and it was his industry and enthusiasm which raised from the dust of oblivion the names of great medical men of the early times of our country, and who, but for him, would now be forgotten. No American physician or surgeon ever received so many honors from his professional brethren as he, and no other American physician or surgeon has done so much to elevate and dignify his profession.

THE Eye, Ear, Nose, and Throat Hospital of New Orleans has taken steps to stop the abuse by the well-to-do public of the medical charities of that institution.

URIC ACID DIATHESIS IN AFFECTIONS OF THE EAR, EYE, THROAT, AND NOSE.*

BY W. CHEATHAM, M. D.

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This subject is not a new one, but a series of cases I have had lately, with the following editorial clipped from the New York Medical Journal of February 15th, has led me to call the attention of the profession to it. I do not think it well, in such a body of men as is represented here to-day, to review the causes which lead to the uric-acid diathesis and its correction, etc.

The editorial article to which reference is above made is:

"LITHEMIC MANIFESTATIONS IN THE UPPER AIR-PASSAGES.—In the American Journal of the Medical Sciences, Dr. A. Whitehall Hinkel calls attention to this subject as one that has hitherto received but slight consideration in laryngology. The local and surgical view has somewhat usurped the place of more general research into causes that produce effects of apparent similarity, yet of widely different origin. Harrison Allen has reported five cases of gouty sore throat. Less well defined forms of inflammation present certain appearances and symptoms not in themselves pathognomonic. These, taken in connection with the history and general condition, together with the results obtained by measures directed to the lithemic state, indicate their dependence upon the so-called defective laboratory work of the liver, concerning which but little is known. The term lithemia is tentative in character, based upon clinical manifestations solely, and applied with considerable latitude as to meaning. It is used by Dr. Hinkel as Murchison uses it—to express a condition of suboxidation and over-charging of the blood and excretions with excretory matter in a state of faulty elaboration, due to inherent and hereditary abnormality of function, or to prolonged exposure to depressing environment. Dr. Solomon Solis-Cohen calls it an abnormal normality; that is, an inherent departure of the individual organ-

ism from the typical action of like organisms. Starches, sugars, acid fruits, and some other ordinary articles of diet are said to produce peculiar disturbances in the lithemic constitution. The utmost simplicity and regularity of diet will not prevent recurring exacerbations of characteristic symptoms when the pursuits are sedentary and there is unusual mental or nervous strain. There is a tendency to form uric acid in excess, together with a waste of phosphates and digestive, mental, and nervous phenomena as easily recognizable as they are harrowing. The American's environment renders local attacks of gout rare, while the nervous and digestive forms are not uncommon, especially in individuals of gouty ancestry.

"Lithemic manifestations in the upper air-passages fail to present conditions that invariably announce their origin, and they are not uniform in type; at the same time, certain given appearances or symptoms are more or less connected with lithemia, and suggest treatment for that condition, whatever local measures may be indicated. A patchy congestion of the laryngeal face of the epiglottis, extending along the aryteno-epiglottic folds and over the posterior aspect of the ventricular bands, is occasionally seen in cases of irritable sore throat associated with lithemia. There is also a harsh, dry cough, with a sense of extreme irritation about the larynx. This patchy congestion of the mucous membrane has been observed, by means of the cystoscope, in the bladder of a lithemic subject. When the patchy inflammation is present there is extreme sensitiveness to astringent and stimulant applications, which in itself is a point of diagnostic significance. A case cited—aggravated by aromatic inhalations, mild astringent sprays, and solutions of sulphate of zinc or silver—was promptly relieved by alkalies and antizymotics, together with inhalations of diluted lime-water, and a carefully arranged diet. This patchy condition may exist in the pharynx, extending in streaks along the postero-lateral walls, with a sense of uneasiness or pain on swallowing. The pain darts into one or both ears, and 'seems to come out of the ear—to be a very long pain; in fact, apparently extending beyond the surface of the body.' The

*Read at the May meeting of the Kentucky State Medical Society, 1890.

pain of gouty sore throat appears severe out of all proportion to the degree of inflammation. Periodicity may prove, on investigation, to constitute a symptom of lithiatic manifestations in the upper air-passages. Lithic storms have been accompanied by marked naso-pharyngeal catarrh not present in appreciable degree during the intervals, the symptom appearing several days before the digestive and other disturbances. General medication and hygiene serve to check the catarrh and the general attack. In such a case, iodine and stimulant applications are extremely irritant. Obstinate relaxation of the venous plexus of the turbinated bodies, coincident with general lithemic indisposition, can not be treated to advantage with caustics, on account of too great inflammatory reaction. Soothing local applications, diluents, and alkalis internally, and general hygienic measures are the most effective means of relief. Damp, cold winds invariably bring about, in certain lithemics, inflammation and occlusion of the nasal chambers to an extent not severe, but very annoying. Local measures avail but little, while general treatment is followed by good results.

"It seems, then, that there is a grain of truth in the old fashioned idea that the doctor should understand the constitution of his patient. Possibly the division of the body into bits, and the minute study of localities and structures has a tendency to narrow the medical horizon. Without perspective, vision is necessarily restricted. Treating the disease and not the patient may be interesting from the standpoint of experimental science, yet it must inevitably fall short of gratifying the sufferer, whose only aim is to get well."

The following case has been one of great interest to me. Mrs. H., a stout, healthy-looking woman, came to see me, or my assistant, Dr. Pusey, while I was absent last summer, with this history: For nine weeks she has had full sensations in her throat, with sometimes difficulty of breathing. She catches cold easily; has engorgement of nasal tissue; has had three children in five years; nursed all of them; menstruates while nursing; has frequent spasm of the glottis; yesterday felt as if there was something in her larynx; has had rheumatism.

There was but little in the throat to account for such symptoms; some slight granulations on posterior wall of pharynx, some enlargement, and hyperemia of papillae of base of tongue, which were reduced by the galvano-cautery; some slight redness of the epiglottis; she had pain in back of neck. All local medicinal applications made the symptoms worse. Thinking there was a hysterical element in the case, I put her on the valerianates with no good result. At her next visit I questioned her as to her urine; as to whether there was much pain on its passage. She said, yes, it burned her. Examination of her urine showed urates and uric acid in great excess. I immediately put her on salicylate of lithia, with a restricted diet, especially urging that all sweets be left off. After this treatment for a few days all bad symptoms disappeared. The restricted diet appears to be of more service than the medicine. She can not get relief by use of medicines alone, but by dieting and leaving off the medicine all unfavorable symptoms disappear. This is only one of several cases I have seen lately. So I have seen acute coryza and incessant sneezing, and symptoms such as seen in so-called "hay-fever," relieved by such treatment. In these cases the urine showed the cause. I have seen frequently cases of asthenopia or painful eyes with and without weak muscles, and with and without errors of refraction, relieved by the proper treatment, after the diagnosis of uric acid in excess had been made. I have seen in the last year four cases of relapsing episcleritis which were relieved by attention to diet and the correction of an existing uric-acid excess. As to what an excess of uric acid is, it is difficult to state. The books say the normal amount varies from .4 to .8 grams in twenty-four hours. The amount differs greatly at different periods of the day, sleeping or awake, and before and after meals. The proper treatment will verify the diagnosis and relieve many unrecognized cases. I can go through my case book now and find in the first years of my practice many with such histories as given in this paper unrelieved, because the cause was not then recognized. Some of these have gone the rounds, and not getting relief, have in the last few

years returned to me; have been put on the proper treatment and cured. I remember one, the most distressing case of spasm of the glottis I ever saw. It was in the person of a lady, who could not leave her house without carrying with her chloroform pearls, to break and inhale should she be attacked while from home. This lady was cured by dieting and salicylate of lithia. I have for years looked upon a majority of the affections of the tonsils as rheumatic in origin, and no treatment relieves them as readily as the salicylates, guaiac, etc.

LOUISVILLE, KY.

GUNSHOT INJURY OF SPINE WITH PARAPLEGIA—DEATH AFTER TEN YEARS—AUTOPSY.*

BY M. E. ALDERSON A. M., M. D.

The general impression among the majority of the profession, as well as the public, is that traumatic injuries, of whatever nature, of the spinal column, involving the cord or its membranes or both, even to a slight degree, are of the gravest import, and should be tampered with as little as possible. This feeling has produced a decided timidity and consequent want of judgment, where accuracy of diagnosis and boldness of action are most urgently demanded. Especially is this true in gunshot injuries of the spine, where the excitement is always intense and the unfortunate patient's helpless and almost hopeless condition converts the anxious and deeply interested relatives and friends, and of course their respective medical and surgical advisers (among whom there is nearly always that "*rara avis*," the envious soul) into a court, as it were, which sits in judgment awaiting the results, ever ready with sarcastic and uncharitable criticism to cauterize the feelings and to blast the professional reputation and standing of the operator who is so unfortunate as to hold the case. Is it any wonder, then, that so few operations for removal of missiles from the spinal vertebræ are attempted? Surgeons with confidence trephine and raise bone and foreign bodies from a compressed brain; then why not enlarge a wound and remove a bullet and spicule of bone which may

be pressing upon the theca vertebralis or spinal cord itself? It may be said, the resulting meningitis or myelitis will spread to the cerebrum because of continuity of structure, and thus produce death. But why, after the compression is removed, will inflammation of these structures more likely result than cerebritis in injuries to the brain? The chances are that by an immediate operation and active after-treatment it will not result, and if it should it will be circumscribed only and readily undergo resolution. I refer, of course, to wounds which do not lacerate and crush through the cord, as a crushed cord can not recover itself.

Cases of traumatic spinal meningitis and traumatic myelitis have been much less frequently recorded than traumatic cerebral inflammations. Numerous cases of traumatic meningitis and myelitis undergoing resolution have been reported by our military surgeons, as developed by autopsies held during the late civil war, and were commented upon as giving sure ground for hope of obtaining cure where timely aid was given by surgery and medication. I am aware of the fact that I am entering upon the discussion of a question upon which most decided opinions have been given by some of the best surgeons of the land, opinions which have been submitted for record, and from their distinguished source have molded or biased the opinions of the surgeons who have come after them. Truly it has been regarded the most difficult and dangerous operation in the domain of surgery. Those who attempted resection or trephining of vertebræ were scored by their fellows and met mortifying failure. So in abdominal surgery, until a short time ago, the same trepidation and traditional fear kept us off the peritoneum. What a revolution, however, has taken place! This delicate and high-toned membrane is now punctured, torn when adherent, and cut almost *ad libitum* with the confident assurance that it will heal as kindly as the structures through which we go before reaching it. Yea, some of the most brilliant and happy results of modern surgery have been achieved in this field, and we may confidently expect the skill and acumen of the coming surgeon to triumph over every traumatism or

* Read at the May meeting of the Kentucky State Medical Society.

disease in whatsoever part of the human anatomy it may strike.

In the case which is the subject of this report there were both contusion and compression of the membranes and cord, producing circumscribed inflammation, and I think I am justified in the assertion that resolution was attempted notwithstanding the presence of the point of a conoidal pistol-ball projecting into the spinal canal. Furthermore, when we take into consideration the symptoms developed, their decrease and increase, the length of time the patient lived, the decided absence of spread of inflammation above the point of the ball's location, as proven by the absence of paralysis, the functions of the brain, heart, lungs, and stomach remaining in first-class order throughout until a few months before death (the stomach then being first to fail), we are still further justified in asserting that on removal of the compression resolution would have continued to convalescence and final restoration. There was evidently concussion too from the impinging force of the bullet upon the vertebræ, as there was loss of reflex action in all parts supplied by spinal nerves given off below the ball, recovery from which, however, shortly followed. There was complete loss of sensation and voluntary motion in all parts below a line drawn around the body near the tenth dorsal vertebra. The conoidal ball, caliber 38, fired from above, entered at an angle an abundance of adipose and muscle just over the fourth dorsal vertebra, to the right about an inch, going downward and inward to the depth of seven inches, as shown by the probe of the surgeons in attendance. The external wound was dressed, and healed completely in a few days. As stated by the family, the general belief was that paralysis was from concussion, and that it might be only temporary, hence conservative and expectant treatment was adopted.

The patient, Mr. A. G., was shot at Auburn, Ky., on the night of April 27, 1886, by one of a mob while assisting in the rearrest of an escaped prisoner. He was in a stooping position, and upon receipt of shot was immediately paralyzed in the lower half of the trunk and lower limbs. He remained under

the care of his family physician without much change until August following, when he was taken to a surgical institute at Indianapolis. Here he remained until January 25, 1887. In order that I may show, in the progress of the case, some proof of my assertions, the autopsy proving the rest, I will quote from the patient's own diary, kept from the time he entered the institute until a few days before his death in this city, January 17, 1890. He had, in his own writing, a note of every day, except when too feeble to write, and then his affectionate and ever attentive wife supplied it. That I may not be burdensome, I will cull only a few notes in making the history. He begins each day's note with this statement: "Treatment, steam-bath, cupping, rubbing, electricity, and medicine; ice-bag to spine, day and night. August 29th, first symptoms of returning sensations in right leg. September 29th, in both legs sensations unusually keen, feel also activity in bladder and urethra; October 12th, can move both legs; October 22d, can feel touch on scrotum and penis, and catheter passes easier; November 11th, sensations in bladder increased. Can now move my toes at will. December 10th, the treatment invigorates me, but my only fear is the bullet is pressing on spine, and there will be no relief until it is cut out. December 12th, new member of staff comes in and says the bullet in spine is giving trouble now, and it should have been taken out at the start. Ah, indeed! December 19th, same member of staff says patient will do as well at home as here. Of course, exchequer is getting low, as patient says in his diary. January 25, 1887, leaves Indianapolis for Louisville, Ky., and enters Norton Infirmary. Was visited by several noted surgeons of that city. Time set for operation, but for some cause was not undertaken. Was under treatment until May 7th, when he returned to his home at Auburn, Ky., still using iodide of potash, ergot, and bichloride of mercury, which combination salivated him, causing him to leave it off. In a short time chills set up, supposed to be of malarial origin, and were treated accordingly. On June 4th a flow of pus from the rectum makes itself known, and continues at intervals until the summer

of 1889, when it becomes a constant symptom. Bear in mind, now, that with the fluctuations of the pus the chills kept pace. The patient now was able to be dressed and wheeled around in his chair, and so continued until September, 1889, when he was confined to his bed. He was visited and examined by a dozen surgeons and specialists on diseases of the rectum during the two years from January, 1887, to August, 1889. Many and various were the theories as to the location of the ball and the source of the pus, and the remedies to heal sinuses and fistulae. The external sphincter ani was cut, and the chills put in their work as usual.

The writer saw the patient first in consultation on August 21, 1889, and again on the 28th, and then no more until November 15th, after which I visited him at intervals until his death, and held the autopsy. My opinion was that the ball was located near the intervertebral notch of the eighth and ninth dorsal vertebrae, having struck the transverse process, pressing upon the membranes and cord at that point, and that the cord was not severed, the general opinion being to the contrary; that the chills were septic, and that the pus from the rectum was from a psoas abscess, caused by final disintegration of the cord structures and necrosis of bone. This pus, following down the psoas muscle, collected near the thin wall of the rectum, which, being the point of least resistance, gave way. From this source the pus burrowed outward over right hip, where it formed a sac which was evacuated, and before death, notwithstanding a drainage-tube in the hip, pushed its way to the right calf. He died of septicemia on January 17, 1890. At his request I held the autopsy on January 18th, assisted by Drs. Keen and Byrne, of this city. The following facts were elicited.

Autopsy was held on the morning of January 18th at 11 o'clock, twelve hours after death. *Rigor mortis* well developed. Body very much emaciated. By request of the family no part of body was disturbed except that part of the spine in which I had located the missile. The posterior surfaces of right thigh and leg nearly to heel were very dark, showing course and extent of the abscess after it left the rectal

wall. A few hours before death the patient talked very calmly and intelligently about the location of the ball, and requested that the incision in his back should extend from the entrance of the ball above to a little below the dead-line. Hence an eleven inch section of the column was removed, after which no further examination of the body was made, except the cut ends of the cord above and below, and the source of the abscess. Structure of the upper end normal, lower infiltrated with pus. The track of the abscess in the muscles was cut through. The ball was found imbedded in the transverse processes of the eighth and ninth dorsal vertebrae on the right side of the spinous process; it struck at an acute angle upon the process of the eighth, was driven through, and was split into two parts upon the sharp edge of the process of ninth underneath. One part ran up between the two processes and the other hugged the under part of the ninth, pressing upon membranes and cord. This lower half, with a spicula of bone attached, produced the paralysis and its results.

RUSSELLVILLE, KY.

REPORT ON OTOLOGY.*

BY SAMUEL G. DABNEY, M. D.

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Early Treatment of Aural Affections. "I have been advised to let my ears alone," is the answer often made by patients when asked by the aurist why they have delayed treatment for so long a time. To this most erroneous and unfortunate advice a large class of persons owe their incurable deafness. Of 525 cases of chronic non-suppurative aural catarrh observed by Dr. Roosa, more than 50 per cent. had been aware of some loss of hearing for over five years. Such an experience is still the rule with aurists, and so long as it is the rule the treatment of this class of affections must remain the opprobrium of aural practice. The laity should be taught that diseases of the ear are amenable to treatment in proportion to the brevity of their duration.

*Read at the May meeting of the Kentucky State Medical Society, 1890.

Nose and Naso-pharynx in Ear Diseases. Much of the progress which has been made in the treatment of the ear in recent years is due to a better understanding of its relations to the nasal passages and post-nasal space, and consequently a more rational therapeutics. Broadly speaking, it is fair to say that the treatment of the upper air-passages in the last few years has become more surgical and less medical. It must be acknowledged that in this, as in most new departures in medicine, enthusiasm has occasionally run to a wild extreme. The wonderful influence of a deviated nasal septum upon the general nervous system, upon the diseases of the ear, and upon catarrhal affections of the upper air-passages, claimed by a few authors of prominence, has not been substantiated by the profession at large; when, however, such deviation exists as to materially obstruct the passage of air through the nose, and especially if mouth breathing is thereby necessitated, it should be removed. Of equal importance is the thorough examination of the nasopharyngeal space. Adenoid vegetations or the broad, cushion-shaped enlargement of the so-called third tonsil are often causes of disease in the ears. To cocaine and better instruments we are indebted for much of the recent advance in these departments. An examination of the ears should never be considered complete without inspection of the nasal chambers and post-nasal space.

Use and Abuse of Boracic Acid. Since Bezold in 1880 advocated the insufflation of boracic acid into the ears in inflammation of the middle ear with perforation in the drum membrane, it has become not only a popular but almost a routine measure in the hands of many practitioners. Its *untimely* application has sometimes converted a mild inflammation of the tympanum into a serious disease of the mastoid. It should never be used while the symptoms are acute nor when there is only a small opening in the drum membrane, situated in the membrane flaccida. Theobald, of Baltimore, calls attention to the superiority of a saturated solution of boracic acid over the same remedy in the form of a powder.

Earache and the Treatment for it. Earache is generally due to an inflammation of the tym-

panum, not to an inflammation of the drum membrane, the so-called myringitis alone. Myringitis unattended by inflammation of the deeper lying parts is decidedly rare. Cocaine is not usually an efficient remedy in earache; it can be absorbed only when there is an opening in the membrana tympani, as the outer dermoid layer of the membrane is not capable of such absorption to any considerable extent. Hot applications stand at the head of the list of remedies for earache. Their failure to give relief is often due to their not being correctly applied. It is frequently not enough to lay cloths wrung out in hot water over the ear, or to apply dry heat in a similar way; then the hot water should be allowed to run gently into the canal of the ear, thus coming in contact with the drum membrane; this may best be done with the aural douche, care being taken that only enough force is used to allow the water to run gently into the ear. The continuance of this application for fifteen or twenty minutes or more, the water as hot as can be borne, will generally give relief. Should it fail, a solution of sulphate of atropia (gr. i to the oz.) is often an excellent remedy. Williams, of Boston, in a recent article, claims to have found this prescription always efficient in relieving the nocturnal earache of children. It has been very useful to me, and I generally combine sulphate of morphine (gr. iv to the oz.) with the atropia; a few drops of the solution to be poured into the ear. When suppuration of the middle ear is imminent, or when the pain has resisted other remedies, leeches should be used. Of course, as soon as suppuration has occurred the drum membrane should be punctured, thus relieving the pain and shortening the course of the disease. In children subject to earache it is well to inflate the ears with Politzer's bag occasionally.

Menthol in Furunculosis of Auditory Canal. Cholewa, of Berlin, has found a twenty percent solution of menthol in oil, applied on a tuft of cotton, effective in relieving the pain and arresting the progress of furunculosis in the auditory canal; he attributes the result to anti-bacterial action. The cotton tufts should remain in place for twenty-four hours if suppuration does not occur. This treatment I

have not yet tried. Early incision has done more to relieve the pain of furuncle than any thing else in my hands; but incision does not give the same relief here as elsewhere, because of the cylindrical shape of the canal; keeping the cut surfaces in close apposition; and hence if menthol on further use is found to do what is claimed for it, it will be a valuable addition to our therapeutics.

Acids in Caries and Necrosis of Temporal Bone.

Diseases of the ear, complicated by caries or necrosis of the walls of the tympanum or canal, are difficult to cure. Bone disease may be suspected when the odor of the discharge indicates it, and when the case has long resisted all ordinary measures, even although the denuded and rough bone can not be felt with a probe. Among the remedies applied in such conditions acids have held a prominent place. The investigations of Ole Bull encourage us to their further use, and give the preference to a four-per-cent solution of nitric or muriatic acid. The acid may either be dropped into the ear, or a piece of absorbent cotton saturated with it may be placed in the ear for twenty-four hours.

Facial Paralysis Consequent on Otitis Media.

Paralysis of the corresponding side of the face sometimes occurs with inflammation of the middle ear. It is generally the result of a violent suppurative process, and due to caries of the bony canal through which the facial passes and involvement of the nerve. In such cases the paralysis is likely to be permanent.

At the last meeting of the American Otological Society Dr. Holt, of Portland, Maine, reported a case of acute catarrhal otitis accompanied with facial paralysis and paresis of accommodation. Quite recently I have seen a similar case, except that the accommodation was not affected. The patient was a married lady of about forty years of age. After several days of intense earache in both ears, and deafness so great that the voice could be heard only when spoken in very loud tones near to the ear, she observed that she could not close her right eye and that fluids would trickle out of the right side of her mouth on attempts at drinking. The facial paralysis, though not complete, was well marked. There was at no

time any purulent discharge from the ears, though in each drum membrane there was a small opening, giving exit to a little mucous fluid.

After an obstinate course of three weeks the ear trouble was perfectly relieved and the hearing entirely restored. The facial paralysis is much better, and is still improving, though not yet well.

Better Hearing in a Noise. That certain deaf persons hear much better in the presence of a loud noise was observed long ago. The textbooks usually devote considerable attention to a consideration of this symptom and to the theories of its causation. It is not very rare, and it is important to note that when it is present the prognosis as to results of treatment is usually bad. There are exceptions to this rule, but it is sufficiently invariable to make it of decided value in prognosis.

Cerebral Complications of Ear Disease. Another brilliant achievement in cerebral surgery has lately been announced. An abscess of the cerebellum, the result of a suppurative inflammation of the middle ear, was successfully operated on by Macewen, of Glasgow. The patient, a young man seventeen years old, was brought to the hospital in a state of coma; pulse weak and slow, respirations about 10 per second, and marked optic neuritis. Ear disease was detected, and a sinus found behind the auricle. An incision over the cerebellum opened an abscess and gave vent to about four ounces of pus. The patient made an uninterrupted recovery.

Von Bergmann, in his work entitled "The Surgical Treatment of Brain Diseases," asserts that probably one half of all abscesses of the brain are caused by suppurative inflammation of the middle ear, that such inflammation is always chronic, and often the result of a purulent otitis media, beginning in youth. When we remember that abscess of the brain is only one of the many disasters that chronic suppuration of the tympanum may produce, the aurist need surely make no apology for asking of the general profession such attention to inflammations of the ear as will prevent this chronic suppuration, or, should it already exist, the use of all possible means to cure it.

Removal of Ossicles in Chronic Otorrhea. A few years ago Sexton, of New York, proposed to remove the ossicles of the middle ear in cases of chronic suppuration which resisted all other measures. He announced a number of cases showing good results from this procedure. The plan has been adopted successfully by a few other aurists, and several cases have lately been reported where there was good hearing power in the absence of the stapes, as well as the malleus and incus. I have not yet seen a case in which the removal of the bones of the middle ear seemed to me to be indicated.

Perforation in Drum Membrane and Artificial Membrana Tympani. Not only among the laity, but even among otherwise well-informed physicians, there is a prevalent belief that an opening in the drum membrane of the ear causes great deafness. As is well known to aurists, a considerable perforation may exist with excellent hearing. Recent perforations, moreover, are usually quickly repaired, and the discharge attending them cured. To this there is one striking exception: perforations through the membrana flaccida into the attic of the tympanum are exceedingly obstinate, and are very often attended by caries of the walls of the tympanum or canal. Blake's tympanum syringe is a useful instrument in such cases; but my own experience has been that patients with this form of inflammation discontinue the treatment before the opening is healed or the discharge arrested.

It is an interesting fact that to a New York merchant we are indebted for the idea of an artificial drum membrane. In 1841, a gentleman from New York consulted Dr. Yearsley, of London, in regard to his ears. He incidentally mentioned and demonstrated that so long as he kept a piece of moistened paper in his ear in a certain position his hearing was quite good. From this originated the application of the artificial drum membrane. It is a device occasionally of great use, both in improving the hearing and aiding the repair of perforations. It is, however, so often applied to cases in which it can not possibly be useful, and may perhaps be injurious, that on the whole it may be questioned whether it has not caused more disappointment and harm than benefit.

When it does good, it is probably by giving support to and holding in position the ossicles of the middle ear. Much disappointment might be saved, and irritation of the ears avoided, if deaf persons would consult their physicians before investing in an artificial drum membrane.

The Causes of Total Deafness. My attention has been called to this subject by having seen in the last few weeks three cases of almost absolute deafness.

The first was a little girl seven or eight years old, seen May 1st. She was absolutely deaf, and had been so for a year. Her mother said the deafness followed brain fever; and it seems probable that there had been a meningitis, followed by inflammation and consecutive atrophy of the auditory nerve. Sight was good, and except for the loss of hearing the recovery had been complete.

The second case, also a little girl, lost her hearing from scarlet fever. A deep sinus opened at a point back of the center of the auricle, and the contents of the tympanum were destroyed. There had probably been also an invasion of the labyrinth. This child, too, had been deaf for a year or more.

The third case was a young lady of about seventeen years of age. Her uncle told me that she had been almost absolutely deaf for three years; that her ear disease had reached its climax within two months of its beginning, and had been stationary ever since. Such a history at such a period of life was at once suggestive of inherited syphilis, and the diagnosis was not far to seek. Corneæ still marked by diffuse interstitial keratitis; upper incisor teeth of the typical Hutchinson variety; a doughy skin, with peculiar scars about the angles of the mouth and forehead, together with a deep and ragged ulcer of the side of the pharynx, and almost absolute deafness, presented a picture of inherited syphilis in a form fortunately not often seen. The ulcer of the throat healed very rapidly under iodide of potash and mercury and tonics. The hearing is, of course, lost forever. The tuning-fork test gave a negative result. Such a case is all the more melancholy because there is reason to believe that its true nature was not recognized in the incip-

iciency of the deafness, and thus the patient was deprived of whatever benefit might have been obtained by prompt and energetic treatment.

LOUISVILLE.

WOUND DRAINAGE.*

BY AP MORGAN VANCE, M. D.

As late as ten years ago it was thought that the most important element in wound management was to secure good and sufficient drainage. This axiom has been less dwelt upon as our knowledge of asepsis has increased, and the ideal treatment of wounds should be without drainage, but until the aseptic details are better understood we will be compelled to use this safeguard in a certain proportion of cases. The perfecting of the means by which drainage will be best accomplished has been the subject of considerable thought by modern surgeons. As the result, we have the soft and hard rubber, decalcified bone, and the glass drainage-tubes; on the other hand, as capillary drains, we have the gauze, the catgut, the horse-hair and silk, all good in their proper places and when properly prepared, but each falling short of an ideal drain. An ideal drainage tube should be non-irritating, aseptic, and absorbable, the time required for its absorption being regulated by its preparation, and no residue should be left behind. This has never been accomplished. It was thought that the decalcified bone filled the conditions, but experience has proven otherwise. This form of tube is unreliable, though acting almost perfectly at times. This is the only example of an absorbable tube yet suggested.

The great advantage of the absorbable drain is that the case may go through with one dressing, a great advantage in many ways. Now it is to suggest a possible method of attaining this object, at the same time using unabsorbable material, that I write this paper.

The fact that it is better to remove the drain sooner than it is at all necessary, or best to change the first dressing, is a well-known fact, and has suggested to me two methods of getting rid of the tube without interfering with

the dressing. The first I may call the *self-removing tube*. It is arranged after the following plan:

Take ordinary rubber drainage tubing of proper size for the wound that you wish to drain (amputation for example), cut and perforate two pieces which are each in length one third the extent of the wound, then tie them together with a very fine catgut suture so that the two extremities that are free will correspond to the angle of the wound. To these fasten small rubber bands, to the other end of which a piece of rubber adhesive plaster is attached. This plaster is to be fixed to the limb at a sufficient distance from the wound to put the rubber bands on the stretch, so that when the catgut yields on account of weakening by absorption the short tubes will be teased or drawn into the dressing. To be sure that the close fit of the dressing will not prevent this, a gutter-like shield of hard rubber may be placed in such a way as to form a little cell for the reception of the tube. The size of the catgut suture will regulate the time at which the wound will be freed from the tube. The gauze, horse-hair, or silk could be used in like manner when the hard rubber shield is not necessary. The second method is to dispense with the catgut connection between the two short tubes or capillary drains, and simply fasten to the outer ends a stout ligature, or, better, a piece of gauze long enough to extend beyond the borders of the dressing; and when you desire to get rid of the drain, make steady traction, when it will easily slip into the soft dressing. I know that we all have found the tube, as ordinarily used, out of the wound from shifting the dressing, which proves the ease with which it slips out; the seepage keeps the parts moist and aids the removal. The short tubes used in the ordinary way are to be preferred to the old way of having one tube extend through the wound. In this way you have two open ends in the wound besides the opening on the sides, which nearly always become stopped with coagula or tissue. By using two short tubes you also get rid of the necessity of drawing the long tube through the wound with the chance of infection from material which has been exposed.

These suggestions apply only to ordinary

*Read at the May meeting of the Kentucky State Medical Society, 1896.

wounds. To meet the special requirements for drainage about the chest, abdomen, etc., different methods must be followed.

LOUISVILLE.

A REPORT ON PATHOLOGICAL HISTOLOGY AND URINALYSIS.*

BY SIMON FLEXNER, PH. G., M. D.

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In presenting this report I desire to state that it is not my intention to record the progress which has been made in the last year in the branches of research with which it is concerned. Its scope is much narrower than this, comprising as it does only a partial record of such pathological work as has come under my own observation.

In this connection I first of all call your attention to the importance of the clinical examination of the blood. The blood is in two ways a factor in disease, according as it is itself the seat of the lesion, or as it reflects abnormal conditions existing elsewhere in the economy, or both. Hence arises the necessity for careful examination of the blood in the first place. Moreover, as it is a fluctuating factor, subject to alteration in quantity and quality from time to time, repeated examinations are demanded as the disease progresses.

Doubtless frequent examinations of the blood will lead to clearer views of the pathology of certain lesions, now still obscure; provide us with more reliable means of diagnosis, and, by exhibiting with accuracy the progress of disease and the effect of treatment, guide us to a more rational therapeutics.

I report two cases only, to emphasize what has been said as to the value of such examinations. The first case reported has great interest aside from its use in this connection, and I hope will be reported fully at an early date. It is the record of a case of progressive pernicious anemia:

Mr. L., age thirty-five, a patient of Dr. J. A. Ouchterlony, resided in the interior of the State. Eight months ago while West he began to fail in health. When I first saw him, which was early in December, 1889, he was appa-

rently bloodless; conjunctivæ, lips, and nails colorless; complexion waxy; he could not have his head raised from the pillow without fainting. The examination of his blood at this time gave the following results: Hemaglobin, 15 per cent; red corpuscles, 750,000 to cubic millimeter.

The next examination was made on December 30, 1889, with the following result: Hemaglobin, 25 per cent; red corpuscles, 1,325,000. At this time color was beginning to show under his nails. He was still very weak.

His urine was examined on December 6, 1889. It was as follows: Color, yellow; reaction, highly acid; specific gravity, 1.014; urea, 2.5 per cent; indican, marked reaction; albumen, .5 of 1 per cent; casts, none.

A few weeks after this examination of his blood he returned home feeling much better.

April 20, 1890, he returned to Louisville, as he had suffered a relapse. His condition on the 26th, when his blood was examined, is represented by the following: Hemaglobin, 10 per cent; red corpuscles, 425,000. April 27, 1890, his urine was again examined: Color, pale yellow; reaction, acid; specific gravity, 1.014; urea, 1.5 per cent; albumen, $\frac{1}{12}$ of 1 per cent; casts, hyaline and finely granular.

April 30, 1890, his blood was again examined. It was: hemaglobin, 10 per cent; red corpuscles, 400,000. May 3d, it was: hemaglobin, 10 per cent; red corpuscles, 600,000. That day he was feeling much more comfortable. On May 6th he died suddenly of heart failure.

The next case is one of simple anemia. It is unnecessary to go further into the details of the condition of the patient prior to the date of the first examination, than to say that she had been a well-nourished, vigorous person, who had withstood large demands on her physical and emotional powers in the performance of the duties of a trained nurse, and that her failing health followed attendance on a protracted and unusual trying case of illness.

Miss X, a patient of Dr. D. W. Yandell, was examined on the 15th of December, 1889. At this time she was very pale, lips and conjunctivæ pale. Her face looked full, but her body is thin; had lost weight quite rapidly; her blood was as follows: Hemaglobin, 45 per

*Read at the May meeting of the Kentucky State Medical Society.

cent; red corpuscles, 1,325,000. While, at this time, she was not necessarily confined to her bed, yet the least undue exertion was followed by dizziness and fainting. January 20, 1890, she was again examined: hemaglobin, 70 per cent; red corpuscles, 4,000,000. She had gained strength, and thinks weight also; has better color. At the time of the first examination she could not walk more than a few minutes at a time. Now, January 20th, she is attending to quite arduous professional duties.

The last examination was made on May 10, 1890. She is attending to her professional duties, but is still much more easily exhausted than formerly. She had gained considerably in weight, and her color is better. She had been much better until some weeks ago, when she had an attack of *la grippe*, from which she has not quite recovered. This examination showed: hemaglobin, 75 per cent; red corpuscles, 3,900,000.

Of the cases reported I think it can be safely said that repeated examinations of the blood threw much light on their course and tendency, and in a large measure directed their treatment. There is an impression that this purpose is equally well served by examining a thin layer of the blood under a microscope. This is certainly not to be relied upon, for it is manifestly impossible to obtain a layer of uniform thinness, and, furthermore, it is the picture presented to the eye, not the number of the corpuscles, that determines the result where this method of examination is employed. And even if this method gave results approaching the truth, which clearly it can not, it would leave the hemaglobin unestimated. In the examinations here detailed the hemometer of Fleischl and the hemacytometer of Thoma-Zeiss were employed. These instruments are placed before you, and your inspection of them is invited.

Before closing this part of my paper it may be well to remark that it is possible to estimate the white cells and their relation in number to the red. Finally, the relations of all the elements of this tissue can be determined as related to one another, and in their absolute amounts.

I turn now to the consideration of another branch of clinical microscopy, the bacteriologi-

cal examination of secretions and excretions. That such examinations are capable of aiding the diagnostician in many ways, and that they often furnish him infallible evidence of the presence or absence of certain diseases can not now be questioned. Such, for example, are the examinations of sputa for the bacillus tuberculosis; for the coccus of pneumonia; of pus for the gonococcus in supposed gonorrhea; of the evacuations for the bacillus tuberculosis; the urine for the bacillus tuberculosis, and the splenic blood for the bacillus of typhoid fever. I may also mention that by means of microscopical examination the presence of Laveran's organism (protozoa) in the blood of patients suffering from malaria has been abundantly confirmed and their causal relation to the disease all but established.

These examinations can be made immediately; that is, directly from the materials containing the organism, without any of the delay which would be caused were cultivations of the organisms necessary. Again, an unexpected advantage may be realized by such examinations, as, when in searching for one organism another is found, probably the source of the disease. Such a case is illustrated by the following: Some sputa was sent to be examined for the bacillus tuberculosis. After a careful search none were found, but instead, cocci of pneumonia were observed. The physician in attendance, when informed of this, told me that the patient had had pneumonia some weeks before, and, as he had not convalesced, he suspected tuberculosis. From this result it is probable that the pneumonia was still present. Some weeks later another examination of his sputa was made, and this time bacilli of tuberculosis were found. This was evidently a case in which pneumonia predisposed to tuberculosis. Again, the pus organisms have, by their presence in unusual numbers in sputa, or as one or the other predominated, been used to differentiate suspected tuberculosis from abscess or gangrene of the lungs. This operation is not always possible; it is indeed attended by grave difficulties such as require considerable skill and experience in investigation. Yet I wish to emphasize strongly the fact that a safe inference may frequently be drawn from such examinations.

In cases of suspected gonorrhea the presence or absence of the specific coccus is a matter of grave importance; likewise, the presence of it in the discharge which continues after the specific disease is believed to be cured, and the bacteriological examination of the discharge in these cases enables one to answer these questions. Although there has been much said for and against the diagnostic value of the gonococcus, and whether it can really be distinguished from other organisms found in secretions from the urethra, yet it shows unmistakable characteristics, such as the tendency of the specific cocci to aggregate; to be present wholly within the pus and epithelial cells, or wholly without them; never half in and half out, nor ever in the nucleus. And then, the reaction with alcohol whereby the gonococcus loses its color more rapidly than other cocci, as shown by Roux, or, according to J. Schütz, of Frankfurt-on-the-Main, when treated with acetic acid, Mv ; water, Zvi , after staining with methyl-blue, it still retains its color while other organisms are decolorized.

It would seem that there is some relation between the number of specific cocci present in gonorrhea and the severity of the symptoms. In one case in which I made examinations of the discharge daily, or on alternate days, this was strongly indicated. The number of gonococci in the pus and epithelium diminished as the symptoms abated; indeed, the cocci disappeared before the discharge had entirely ceased.

I pass now to the description of two anomalous tumors. The first was removed by Dr. J. A. Ouchterlony from the back of the neck of a negro man. Its external characters were those of cheloid. Histologically it presents the following features: The surface is covered with a layer of epidermis which is intact. There is a tendency to hypertrophy of the inter-papillary processes of epidermis. This appearance is not greater, however, than is seen over various tumors or chronic inflammations of the skin. The growth is made up principally of fibrillated connective tissue, between the fibers of which are fusiform connective tissue corpuscles. However, the most striking feature of the tumor is numerous scattered foci of densely packed cells. These

give to the tumor, when observed with a low power, an appearance suggesting carcinoma. These foci are of various sizes and shapes, and in the center or occasionally excentrically can be seen a narrow lumen lined by flattened endothelial cells. Hence, it is evident that these foci correspond to blood-vessels or lymphatics. The cells are not free in the foci, but have a small amount of basement substance, and they are the same in character as cells occupying the surrounding tissue. They are then developed from connective tissue-cells in the walls of blood-vessels and of lymphatics. According to Prof. Welch, of Johns Hopkins University, to whom sections of the tumor were submitted, such growths are generally called angio-sarcomata. But in the present instance the fibrous part of the tumor predominates, and hence, he says, one could not call the growth simply angio-sarcoma. It should properly be called fibro-angio-sarcomatodes, or simply cheloid with the addition of the sarcomatous element. It has been two years since the piece of growth examined was removed, and it has not taken on malignant character, although it has continued to grow *in situ*.

The other growth was removed by Dr. William Cheatham from the tongue of a young woman. It was congenital, and increased in size with the bodily development. At the time of removal it was one inch in length, had an oblong base three eighths nearly in long diameter, and a tapering apex. Its histological characters varied in different parts. The apex is made up of irregularly branching and hypertrophied papillæ and a dense fibrillated connective tissue. The middle part of the tumor consists of a loose fibrous structure covered with mucous membrane and traversed by numerous dilated blood-vessels, while the base is covered with a layer of mucous membrane containing numerous large glands, and it is quite honey-combed by enormously distended blood-vessels. This part of the growth is loose in texture, and the connective tissue is scant between the vessels, although thicker around them. The cells which are present are not unduly abundant, nor are they hetero-plastic. Histologically the growth combines the characters of papilloma, fibroma, and angioma.

While not belonging strictly, perhaps, to the domain of pathological histology, yet the fact that the chemical examination of the vomit or lavage has been alleged to be of diagnostic value in cases of cancer of the stomach is sufficient reason for its introduction here. The object of the chemist is to ascertain the presence or absence of hydrochloric acid in the material submitted to examination, and, having detected the presence of it, to estimate its amount.

For the purpose of detecting mineral acids (in this case hydrochloric acid), various reagents, unaffected by organic acids, are used. These reagents are of great delicacy, and are capable of demonstrating a minimum amount of the mineral acid. They are: phlorogulcin in the presence of vanillin (Günzberg's test), Congo red, which may be used as a test paper or in aqueous solution, methyl violet, and tropaeolin. I have named them in the order of their delicacy; and, as to the last named reagent, it is necessary to state that the market contains several varieties; hence great care is required to secure the proper one.

I have made a number of examinations of the vomit and washing in the cases of suspected malignant disease of the stomach, and I have found hydrochloric acid to be absent in many of them. In collecting the material for examination, care was taken to get it after it had remained in the stomach some time, and not when vomiting had occurred immediately after food was taken. Although opinion is divided as to the utility of the test, I have come to regard it of real diagnostic value.

So much for that part of my paper which relates to pathological histology. The points which I have tried to illustrate are more or less disconnected, but I have selected them with an eye looking to the value of clinical examinations of fluids and tissues as an aid to diagnosis, the treatment of disease, and the advancement of medicine.

A REPORT OF 466 URINALYSES.

During the last two years I have kept a careful record of analyses of the urine from cases occurring in the daily practice of various physicians. The specimens subjected to examination do not represent consecutive cases in

their practices, but were chosen, as it was supposed that they had departed from the normal condition.

It seems necessary to make this explanation to anticipate the surprise that such a large number should have contained pathological elements. Had they been taken consecutively, the number approaching normal must have been greater.

It is also necessary to state that in a few instances I made more than one examination of the excretion of the same individual. These are, however, exceptional; and although they occurred most frequently in those cases in which casts were found, yet they form but a small percentage even of them.

In making these analyses the endeavor was made to have them as complete as possible, or at least as complete as clinical necessity demanded. Ingredients, either pathological in themselves or abnormal in quantity, were estimated quantitatively. This is not always indicated in the report, nor does it follow that the mention of a normal ingredient as "present" indicates its excess, for only when the entire secretion for twelve or twenty-four hours was obtained could this have been satisfactorily determined.

As the cases from which these specimens were obtained usually occurred in private practice, it would have been difficult to obtain the entire quantity excreted during twenty-four hours except in a few instances, hence the amount of urea could be indicated in percentage only; the same difficulty made it impossible to estimate uric acid quantitatively. Although not indicated in the report, whenever the total quantity for twenty-four hours was obtained, actual amounts and not percentage present were determined.

The specimens were uniformly treated as follows:

As soon as received they were subjected to chemical and physical examination. They were then sterilized by the addition of chloral hydrate in the proportion of $2\frac{1}{2}$ grains to the ounce, and permitted to stand in a conical glass for subsidence. At the end of twelve or twenty-four hours (time varying with specimen) the microscopical examination was made.

Color. The scale of Vogel was used. The cases arranged themselves as follows:

Light yellow.....	70 times.
Bright yellow.....	26 "
Yellow.....	197 "
Reddish yellow.....	124 "
Yellowish red.....	15 "
Brownish red.....	10 "
Reddish brown.....	3 "

Specific gravity was accurately determined in each instance. It ranged from 1.004 to 1.037, as follows:

1.004.....	1 times.	1.020.....	52 times.
1.006.....	6 "	1.021.....	9 "
1.008.....	13 "	1.022.....	34 "
1.009.....	7 "	1.023.....	13 "
1.010.....	31 "	1.024.....	28 "
1.011.....	11 "	1.025.....	26 "
1.012.....	21 "	1.026.....	27 "
1.013.....	8 "	1.027.....	14 "
1.014.....	10 "	1.028.....	15 "
1.015.....	19 "	1.029.....	10 "
1.016.....	32 "	1.030.....	29 "
1.017.....	10 "	1.031.....	3 "
1.018.....	20 "	1.032.....	6 "
1.019.....	10 "	1.037.....	1 "

Reaction. This was determined with sensitive litmus paper. Three hundred and twenty-nine specimens were normally acid, thirty-seven "faintly" acid, seventy-two "highly" acid, seven neutral, and twenty-one alkaline.

Urea. In estimating this, two methods, both volumetric, were employed, that recommended by Dr. Squibb and the method introduced by Prof Doremus. The first method employs hypochlorite of sodium, and measures the nitrogen resulting from the decomposition of the urea by the water displaced; the second method calls for hypobromite of sodium, and the nitrogen is read off directly after its collection in the arm of the tube. Neither method is absolutely correct, but it is probable that, if care is exercised, the errors are within clinical requirements. The following table indicates the percentage by .5 per cent.

Below 1 per cent.....	40 times.
Between 1 and 1.5 per cent.....	91 "
Between 1.5 " 2 ".....	56 "
Between 2 " 2.5 ".....	88 "
Between 2.5 " 3 ".....	70 "
Between 3 " 3.5 ".....	45 "
Between 3.5 " 4 ".....	23 "
Four per cent and over.....	20 "

Indican is a normal constituent of urine. It is increased in various pathological conditions, and probably varies in health. The methods employed in testing for it were those of Jaffé

and Heller, and marked reactions were obtained in 391 cases.

Uric Acid and Urates. The normal amount of uric acid excreted in twenty-four hours varies between .2 and 1 gram. (Neubauer.) As before stated, the actual elimination was rarely estimated. As a sediment uric acid occurs eighty-two times and urates (crystallized and amorphous) forty-five times.

Earthy Phosphates (crystallized and amorphous) were present in the sediment of fresh urine in fifty-two cases.

Oxalate of Calcium. It is still doubtful whether oxalate of calcium is a normal constituent of urine. According to O. Schultzen, normal urine contains .1 gram in twenty-four hours (quoted by Neubauer and Vogel), while Neubauer says that normal urine is sometimes quite free from it. Of the cases here reported deposits of this salt, varying from a mere trace to comparatively large quantities, often forming a sediment visible to the unaided eye, occurred 116 times, or in just twenty-five per cent of the cases.

Cystin occurred three times. It may be remarked that in one case in which it was found its disappearance was soon followed by the appearance of oxalate of calcium, which had not previously been present.

Sugar was qualitatively tested for by means of Fehling's solution and quantitatively estimated by means of this solution, fermentation and an alkaline solution of cupric sulphate containing glycerine and mannite, recently suggested by Dr. Purdy, of Chicago, Ill. While Fehling's solution is preferred, and I am inclined to consider its proneness to decomposition overrated, still in the difficulty of determining the end reaction hampers its usefulness. I have sought to overcome this by performing the quantitative determination as follows: 1 c. c. is diluted in a suitable test tube with 4 c. c. of water, and five tubes so prepared. Each is heated to boiling, and the urine diluted if necessary, delivered into the tubes in 1-5 c. c., in an increasing ratio, e. g., into first tube, 1-5 c. c., second 2-5 c. c., and so on, the fifth tube receiving 1 c. c. Heat is now reapplied, and the tubes then permitted to stand at rest for a few seconds. If

the color is discharged from any one, the usual method is used for deciding whether an excess of urine has been added. If the color is not discharged from the last tube, the amount of 1 c. c. is made up in all, and then the delivery by 1-5 c. c. repeated. In this way I think I have expedited the operation. In Purdy's solution the sub-oxide of copper is redissolved and the discharge of all color shows complete reduction. Sugar was found sixteen times.

Bile. For the detection of bile two methods were used, one for bile acids and the other for coloring matters. For acids, Oliver's pepton solution was used, although it is doubtful whether the results were uniformly satisfactory. For coloring matters, Heller's test was employed. When the amount was small a quantity of urine was extracted with chloroform and tested in the usual way. Bile was found in eight cases.

Albumen. The usual methods, heat, nitric acid, picric-acid were used. Recently I have used trichloroacetic acid, and it seems to exceed all other tests in delicacy. Albumen was found 215 times—nearly fifty per cent of all specimens examined. As this number seems unusually high, it may be well to mention that it includes all conditions; the presence of casts, pus, blood, and crystals.

Traces were found.....	152 times.
From $\frac{1}{2}$ per cent to $\frac{1}{3}$ per cent.....	29 "
From $\frac{1}{3}$ " " " 1 " "	28 "
From 1 " " " 2 " "	5 "
3 per cent.....	1 time.

The quantitative estimations of albumen were made by coagulation by heat and nitric, subsidence and estimation of volume Esbach's method, which consists in precipitating the albumen in a graduated tube with a solution of picric acid containing acetic acid, was not satisfactory.

Pus was recognized by its microscopical characters. It occurred in quantities varying from a few corpuscles to 1-8 or 1-6 of the entire volume of specimen in 195 cases.

Blood was also determined microscopically. It occurred in varying amounts twenty-seven times.

Renal epithelium was present in fifty-eight cases.

Casts were found in 124 cases. The several varieties as follows:

Hyaline.....	111 times.
Granular.....	53 "
Epithelial.....	12 "
Waxy.....	3 "

In presenting this report I am well aware that it contains little or nothing that is entirely new; nor, indeed, was its preparation undertaken in the expectation of its leading to any decisive conclusion in itself. Quite the contrary, I merely hope to encourage the habit of carefully and systematically recording such examinations in order that the advantages to be derived from the comparison of observations made at successive stages of each case may be realized, and, furthermore, to establish the relative frequency with which different pathological conditions occur. The number of cases reported here is too small to admit of any safe generalization, but I hope in the course of time that reports of examinations sufficient both in number and variety to justify a definite conclusion will be collected. Of the 466 cases reported as having been examined within the last two years, fully three fourths occurred during the last twelve months; and it is therefore not unreasonable to hope that, by pursuing the same method consistently for a still longer period, valuable data may be accumulated.

LOUISVILLE.

Societies.

KENTUCKY STATE MEDICAL SOCIETY.

Annual Meeting, Held at Henderson, May 14, 15, and 16, 1890.

[STENOGRAPHICALLY REPORTED BY H. ALLEN KELCH, M. D.]

The thirty fifth annual session of the Kentucky State Medical Society was held at Henderson, Ky., on May 14, 1890, President Prof. John A. Ouchterlony, M. D., in the chair.

The report of the regular committees of the treasurer and of the permanent secretary were speedily made and adopted, and the scientific work of the afternoon session began by the reading of a Report on Recent Progress in Surgery, by Archibald Dixon, M. D., of Henderson:

The essayist compared the surgery of the past with that of the present day, dwelling with especial stress upon the uses of antiseptics in the management of wounds. In this connection he referred to laparotomy, wounds of the intestines, the radical cure of hernia, and colotomy.

DISCUSSION.

Dr. W. L. Rodman, of Louisville, said :

"This paper is both excellent and interesting. The first point that struck me is what the essayist says about secondary hemorrhage. At the present time it is comparatively unknown. To those who practiced fifteen or twenty years ago this must sound like a strong statement. It may occur, but it rarely does so now. The essayist in his elaboration of the subject carried me back ten or fifteen years ago to my service in the hospital, where in one ward we had simultaneously secondary hemorrhage going on from a wound resulting from shoulder-joint amputation, and in another from one on account of amputation of the thigh. The shrinkage in mortality from secondary hemorrhage that recent years have shown is almost entirely due to the fact that we now do antiseptic surgery.

"Wounds of intestines : More recent statistics bring the mortality down to seventy-five per cent, but they demonstrate at the same time that the earlier patients are operated upon the better ; this question of time elapsed since the injury is a matter of great importance to those who intend to operate on a lacerated or punctured intestine. These more recent statistics show that but little chance exists to save a patient's life unless operative procedures are undertaken within the first fifteen hours ; for when any extravasation has occurred, peritonitis is rapidly set up. If one in four of these cases is saved by operation, that is certainly doing well, for without operation they nearly if not quite all die. Otis, in his report of the surgical experiences of the war of the rebellion, says there is not one indisputable case of recovery of a shot wound of the small intestine without operative interference.

"Brain surgery, as Dr. Dixon has said, has made rapid strides, and when the physiologists have more definitely localized the seat of vari-

ous functions in its mass, no doubt we shall soon follow with the knife and successfully remove tumors from its substance.

"In regard to the radical cure of hernia I have always been skeptical. Probably those who are doing the most of the work in this line, if they had a hernia themselves would not submit very willingly to an operation with that end in view."

Dr. J. M. Mathews spoke as follows :

"I rise particularly to compliment this paper of Dr. Dixon's, which is a complete resumé of surgery. So far as discussing it is concerned, I would as soon think of discussing the multiplication table or any other scientific statement of demonstrable facts. In the face of all the facts now known it seems strange that we should have to-day doubting Thomases concerning the value of antiseptic surgery.

"I am glad to know that we have men in the Kentucky State Medical Society capable of writing such papers, and I am glad to know that we have in the Kentucky Society men who have performed and who are performing every day these grand operations to which the reader has referred. Among the operations that have been said to be impossible, Dr. Dixon neglected to include inguinal colotomy, an operation which since the institution of antiseptic precautions has been brought rapidly to the front, and the sole argument of those advocating it is that to-day we can enter the peritoneal cavity with as much safety under antiseptic precautions as we have ordinarily in the lumbar operation where we do not enter the peritoneal cavity. It has long been claimed that ether and chloroform were the greatest boons ever given to humanity. The same may be said of the operation first given us by McDowell. But since antiseptic surgery has become thoroughly understood and practiced in comparing the surgery of the past with that of the present, both ether and chloroform combined with the original operation can not compare in beneficence with the antiseptic operations we do upon the abdominal cavity. A few years ago we did not dare to penetrate it, but we do not now have to go to England nor to New York, nor anywhere but in Kentucky, to witness these operations done with scarcely a

death in consequence. I say it is strange, in view of these facts, that we have men among us to-day who doubt that there is much in this question of antiseptics."

Dr. A. M. Owen, of Evansville, Ind., speaking in reference to Dr. Rodman's remarks on Radical Cure of Hernia, said: "I have two cases, one of twelve and the other of fourteen years' standing, of operations for the radical cure of hernia, in which there has been no return, and of several other operations done I have had but two returns in the last four or five years, and in those cases I operated again. I feel that he who neglects to operate in these cases neglects his duty. A man who suffers from rupture is in danger constantly from the strangulation which confronts him. He may be seized under such surroundings as will absolutely prevent his being succored, and may in consequence lose his life. (Asked as to the use of a truss, Dr. Owen replied that he uses no truss after the operation.) He preferred silk to any other material for ligatures. It takes care of itself if it is aseptic, and never gives further trouble."

Dr. Wathen said: "There are but two points to which I wish to allude in this very interesting and exhaustive report; the first, that which has been discussed by Dr. Owen, is the Radical Cure of Hernia. I have had the pleasure on numbers of occasions of seeing Dr. Massey operate after his peculiar methods, and it certainly impressed me as a very favorable and beautiful operation. He reports to me that among his many cases he has never had a return and never had a death. His operation is entirely by the buried suture, and he uses Kangaroo tendon prepared by himself for ligatures and sutures. He cuts down, exposes the sack and fastens it into the wound, takes off the sack after suturing, and sutures the fascia so that by the time the operation is complete there have been made two or three layers of sutures; but these are all covered, and at last there remains a little line of sutured integument covered by absorbent cotton, and the patient is put to bed; he has no fever, no shock, no trouble of any kind following the operation, and he claims that the cure is permanent in the most of his cases.

"As to antiseptics, I am in favor of anything that enables us to do clean surgery. If by antiseptics we can do cleaner surgery I endorse them; I do not think they are absolutely necessary. By clean surgery I mean not cleanliness of instruments and hands alone, but with everything connected with both the operator and the patient in the operation. If everything pertaining to and connected with such an operation is perfectly clean, we may then invade the peritoneum with the same immunity we enjoy in dealing with other portions of the body, and with the general system in a reasonably healthy condition we ought to have no death."

Dr. Vance discussed the paper particularly in reference to resection of intestine without bone plates. He said: "In some experiments conducted on dogs I found I could, with immunity, resect portions of the small intestines without shortening the life of the animal. In one case the operation was done twice on the same animal. I resected the same section and found the lumen of the intestine unimpaired, and in this case the animal ate meat and bread without interruption. In the future my impression is that for multiple gunshot wound resection will be the operation practiced rather than closure of small wounds."

"I have had a good deal of experience with hernia, and I am not a believer in the radical cure. I think the term a misnomer. I do not think any man can say before operation that he will make a radical cure. There are neither statistics nor precedents to justify the entire removal of the truss. Dr. Owen says there was return in some of his cases. He was in duty bound to continue the truss. The best cures I have seen have been made by the truss. The indication for operation regardless of extremes of life are manifestations of danger on the part of the hernia. The statistics of the operation are not old enough to prove anything. So many came back to the hospital for the ruptured and crippled in New York during my stay there as to convince me that the operations were not permanent in results."

Dr. L. S. McMurtry, of Louisville, read a paper on Methods of Diagnosis and Treatment in Pelvic and Abdominal Surgery. After calling attention to the difficulties that confront

the surgeon in making accurate diagnosis of pathological conditions within the pelvis, and referring to the importance of bimanual examination, he illustrated his remarks by presenting the history and specimens of seven cases of laparotomy: Case 1, dermoid cyst; Cases 2 and 3, fibroid tumors of uterus—the ovaries and tubes having been removed; Case 4, gall stones, separating gall bladder—cholecystotomy; Case 5, uterine myoma—supra-vaginal hysterectomy; Case 6, sarcoma of uterus—total vaginal extirpation of uterus; Case 7, acute intestinal obstruction—abdominal section.

These cases all recovered, confirming the principle of early interference in such grave conditions of disease, conditions wherein expectancy and so called conservatism invariably end fatally.

Dr. McMurtry's paper will appear in full in the next issue of this journal.

DISCUSSION.

Dr. Wathen, of Louisville, said:

"Mr. President: In view of the fact that I expect to ask the kind indulgence of this Society to make an exhibition of laparotomy specimens supplemental to those presented, I beg to make my remarks on this occasion brief as possible. I was pleased to note Dr. McMurtry's remarks relative to the difficulty of diagnosis in cases of abdominal section. As one grows wiser in his knowledge of pathological conditions of the pelvis and gains more experience in laparotomy work, he learns to place a proper estimate on his ability to make an absolute diagnosis of existing conditions before opening the abdominal cavity. Even after it is opened he may be at a loss for a little time to make an accurate diagnosis. The more we learn about the subject the more we appreciate the importance of what we do not know. Joseph Price, of Philadelphia, was asked in a case what he was operating for. He naively replied for one of eleven things. I saw him operate for a condition he supposed to exist, and he found a large tumor directly adherent to the abdominal wall; he examined it carefully and he said 'it is either a myoma or a pregnant uterus; if it is a pregnant uterus, time will develop the fact; if it is a myoma, I will

remove it entirely later.' He was not concerned about it, because the same thing might have happened to a Tait, a Thornton, or a Burton. I have not always found what I expected to find when I made the incision. One of the cases reported I am familiar with. I am especially interested in the operation where the appendages were removed for the relief of fibroid; it shows more beautifully the effect than any I have ever seen. It is not a dangerous operation, but is often indicated, and especially is this true in view of the gratifying results following the operation. While Dr. McMurtry reports a successful result after removal of a seventeen-pound uterine sarcoma, we can not estimate the probable result of the operation. To-day we are successful in removing a large tumor, to-morrow unsuccessful in removing a small one. Keith has almost abandoned the operation.

"As to the operation for cancer, if I understand the reporter, I think there must be some little error. I have examined the specimen, and apparently it is a malignant form of growth which can be better proven by a careful microscopic examination of the tissues. I can hardly believe this is a form of sarcoma such as he has reported. In view of the fact that such men as Shroeder and Martin, who have done most of the work in this line, and whose notes are most accurate of any, not only claim that sarcoma is the rarest of diseases, but that there is no such thing as a spindle-celled sarcoma of the endometrium, and that there is no such thing as sarcoma of the parenchymatous portion; so while I believe this is malignant in its nature, still I think there is an error in the diagnosis.

"So then even if this is a round-cell sarcoma, it is certainly a very rare form of disease. I did the first operation for sarcoma, I believe, that has been done south of the Ohio River. Malignant disease, when observed before any structure outside of the uterus is involved, admits of operation, and, like the case reported, of good results; but when there is the least fixation of the uterus with malignant disease, no man is justified in attempting hysterectomy for its relief."

Dr. David Barrow, of Lexington, said:

"There is no doubt that many cases similar to those reported pass for cellulitis. I have seen a great many women suffer from day to day, and for a long time in bed, probably two thirds of the time, and I have seen all manner of temporizing plans tried. For a time they improve and we feel hopeful they will recover, but the only ultimate recovery for them is in what Dr. McMurtry has done in his cases, nor could we reasonably expect anything different when we know how in some cases the tubes are occluded, the omentum tied down, and the adhesions extensive. As to the cause, of course it is septic poisoning. Dr. McMurtry's success is flattering and his report enjoyable."

Dr. Simon Flexner, of Louisville, said: "I wish to refer to what has been said concerning the sarcomatous nature of the case reported. I examined the specimen under consideration, and, without being familiar with what has been said concerning the rarity of this form of disease in this location, there can still be no mistake as to the histological elements which the specimen contained. There was an abundance of spindle elements, occasionally a few round cells; this is easily explained by the fact that sarcoma is rarely a pure growth; usually both elements are present, and it is the predominance of one form over the other which determines the form of growth."

Dr. Wathen asked, "Do you not find almost identically the same shaped spindle cells in the muscular fibers of the uterus? Is it not a fact that the best microscopists can not distinguish between the spindle cell of the parenchyma and that of sarcoma?"

Dr. Flexner said: "The only normal spindle cell that can be present in this case is the connective tissue spindle cell; they are distributed equally."

Dr. Dudley Reynolds said: "The spindle shaped cells that represent muscular stricture are very small indeed in comparison with those characteristic of malignant growth."

Dr. Vance said: "I saw a case in which, failing to find the uterus on account of the immense adhesions, I closed the woman up and she has recovered since the operation. I saw Case 5 reported. At that time the woman was forty-five years old. The family history showed

that the menopause occurred about that time, and the diagnosis of superficial fibroids was made. The first time I saw her I agreed to an operation for hysterectomy, not that she was suffering or in danger physically, but because she was in danger mentally."

Dr. Owen, resuming his remarks, said: "Dr. Vance's suggestions remind me of two cases where exploratory incisions revealed a state of affairs that it was impossible to relieve. Both of these cases have improved; the hemorrhages have ceased. Another interesting case to report on account of the various diagnoses pronounced, is that of a woman thirty-six years old who had been treated for anal fissure and hemorrhoids. Prior to my seeing her Dr. Mathews had examined her and pronounced her free from rectal trouble. She suffered great pain in the rectum and anus, and referred it also to the region of the tip of the coccyx; she was always in pain sitting. Her rectum had been explored and treated in various ways. I found she had had a fall some years previous. The coccyx was movable and painful. While she was in bed I thought I had succeeded in curing her, but when she got up I found I had not. She visited friends in Ohio, and while there she was seized with a violent attack, which made an examination necessary. Her brother, who was a physician, detected in Douglas' pouch a tumor. After this she consulted several specialists in Louisville. She was then past sixty and inclined to have the cyst removed. Two weeks ago I found, on bimanual examination, a tumor as large as my thumb. A few days afterward, in connection with Dr. McMahon, of Huntingburg, I made an exploratory incision and found pyosalpinx, the tumor containing between one and two teaspoonfuls of pus. She made a good recovery and is free from suffering. Whether it will be permanent or not I can not say."

Dr. Ouchterlony said: "The case reported by Dr. McMurtry, which I had the privilege of seeing, was one of extraordinary interest to me, not only as a surgeon, but as a physician. There were two points especially about the case that attracted my attention: the first was the character of the paroxysms of pain. What was the character of these paroxysms? In the

first place, they were almost invariably produced by the eating of some article of food or other. However, after investigating more closely, we found that no particular kind of food seemed to be more provocative of the paroxysms than any other. So we were forced to the conclusion that it was the pressure of food in the stomach alone that either by direct irritation or reflexes set up these paroxysms of pain. What was the locality? Was it the stomach or the gall bladder, or was it some other of the contained organs within the abdomen? Was it a simple neuralgia, or was it due to gall-stones, or was it an acute indigestion? It was not neuralgia, from the fact that she had no neuralgia elsewhere. She did not give a history of neuralgia, and anti-neuralgia remedies were of no avail, and remedies addressed to the stomach failed. The severity of the pain and the duration of the attacks were such as to make it exceedingly likely that the gall bladder was the seat of the trouble.

It was unusual to meet with such severe and prolonged attacks from any other source. On the other hand, she had never had any jaundice, nor had any gall stones ever been found in the evacuations, so we were deprived of two very important factors in making such a diagnosis.

The gall bladder itself was difficult to locate. There were times when we thought we could make out a tumor, and then all at once it disappeared. If the stomach was in a state of repletion, which it rarely was, if the intestine was in a state of repletion or distended with gas, it was exceedingly difficult to make out any tumor, but occasionally we could by comparing the condition of the right hypochondriac region with the left. Finally a process of careful and prolonged palpation illustrated a peculiar tick as of gall stones coming in contact with each other. That settled in my mind the diagnosis. Why was it that there had never been any gall stones found in the passages? Why no jaundice? The reason was that the stones were so large they had never been able to pass. As soon as food was taken into the stomach the gall bladder was thrown into contraction by reflex excitation, so there was an attack of gall stone colic without

the usual result of the passage of stones because they could not pass out and cause obstruction of the common gall duct, and therefore no jaundice appeared. So I say this is an exceedingly interesting case from a diagnostic as well as from an operative point of view.

In closing the discussion Dr. McMurtry said: "My friends, Drs. Vance and Owen have alluded to that remarkable fact in abdominal surgery that an exploratory incision sometimes causes a disappearance of the conditions that rendered it necessary. It is in this connection that the difference in fibroid tumors ought to be most thoroughly brought out. Ordinarily the hard nodular fibroid tumor of the uterus gives comparatively little trouble. They are quite common in the African race, and when the menopause comes on they shrivel up and give no further trouble. They are the tumors the electricians cure. Then there are those that are really myomata, as in the case I report, where the menopause causes them to assume a more rapid growth. Other cases pass on to cystic degeneration, and numerous cases are reported where they contain putrid pus. There is nothing else to do in these cases but to remove the growth. It is those of the first character that are prone to shrivel up and pass away that are apt to disappear when an exploratory incision is made. They are entirely distinct, and require to be treated in a different way. The subjects suitable for vaginal hysterectomy must be discriminated with great care. One of the chief dangers of the sound is that septic matter may be transmitted to the endometrium and extend to the mucous membrane lining the tubes.

Wednesday evening the address of the President, Dr. John A. Ouchterlony, of Louisville, on Pioneer Medical Men and Times in Kentucky (see p. 321), was listened to by a select and appreciative audience, after which Dr. G. Frank Lydston, of Chicago, read a paper on Materialism v. Sentiment in the study of Causes and Correction of Crime.

SECOND DAY, THURSDAY, A. M., MAY 15TH.

The scientific work began with the reading of a paper by M. E. Alderson, M. D., of Russellville, on "Gunshot Injury of the

Spine, with Paralysis; death after four years." The specimen was presented showing the ball imbedded in the vertebrae and projecting into the spinal canal. (See page 335.)

DISCUSSION.

Dr. Mathews, of Louisville, said: "Mr. President, I am especially interested in this report because I was consulted by letter in regard to the case. The reporter mentions that the subject who furnishes this specimen was in the Infirmary at Louisville. I did not have the pleasure of seeing him at that time. As I say, I was consulted by letter by this patient, who gave me an elaborate description of his case. In reply I told him I did not think my services were needed, from the fact that there was none other than secondary rectal complication, and that any operative procedure would do him harm instead of good. I am of course pleased to see this opinion verified.

"This case brings to our minds forcibly the fact that doctors, like everybody else, are liable to make mistakes. It is a question with us now after death even what should really have been done. He had the advantage of having a great number of surgeons to see him. I wonder what their notions of treatment would be on seeing this specimen when compared to the opinions they held when they saw the subject who has afforded it."

Dr. T. Hunt Stucky, of Louisville, said: "I am inclined to congratulate the doctor on his diagnosis and its fulfillment. In this day it would seem the duty of the progressive surgeon to cut and search for this ball, provided it could have been located. I believe in exploratory incisions in such cases. If this ball had been removed under antiseptic precautions, even if the cord had been injured, it is difficult to conjecture what the result might have been. I think but little doubt need be entertained that this man would have lived had his true condition been known, as operative procedures would in all probability have been undertaken for his relief."

At the conclusion of this discussion a communication from the Kentucky Pharmaceutical Society was read by Dr. Johnson.

It was received and adopted by the Society.

Telegrams of greeting from the State Medical Societies of Arkansas and Indiana were received and read, and replies ordered to be sent to them.

The Committee on Credentials reported several applications for membership.

Dr. Simon Flexner, of Louisville, then read the Report on Pathological Histology and Urinalysis. (See page 342)

DISCUSSION.

Dr. Ouchterlony said: "Symptoms are common to a great many diseases; they are very unreliable guides. Now and then you find a man of such keen professional instinct that he arrives at one leap at correct conclusions. Such men make often very brilliant diagnoses, and again they make very grave mistakes. For this reason it is that the best minds and the most practical men have for a long time endeavored to convert symptoms into signs. By a careful correlation of facts and a skillful study of them they endeavor to ascertain established facts that can be demonstrated, and that shall be absolutely diagnostic of particular pathological conditions. So in course of time it was we learned that crepitant râles are almost absolutely indicative of croupous pneumonia. In proportion as we can convert symptoms into signs our science becomes certain and accurate. Every means then that tends to make our observations more accurate must be hailed with true delight by all men who have the cause of our science at heart.

"To come, however, at once to the paper to which we have just listened, upon the merits of which I must congratulate my friend. I would say, first of all, in the case of pernicious anemia to which he alludes I could not have made a positive diagnosis without the examination of the blood to which he refers. Such an excessive loss of blood corpuscles could only be guessed at by lending attention to the main facts. An instrument of precision was required to determine the exact degree of loss not only of corpuscles, but of hemoglobin. The subject had been exposed to no harrowing care or sorrow; every thing had gone smooth and pleasant with him; but all of a sudden he began to fail and fade away.

"The symptoms of the case were interesting. There was marked diarrhea, which is quite common in these cases; after awhile a mitral murmur. Mitral murmurs may be anemic as well as organic. In this instance I am sure it was inorganic. It became more distinct as anemia increased. The weakness, the dizziness, the loss of appetite, the nausea and vomiting, all were well marked, and would indicate some recent complication, some form of chronic though hitherto latent nephritis. Later there was evidence of recent complications at times, however, not very marked. The patient died from exhaustion, asthenia, heart failure.

"He went away from the city without my knowledge, and, going to work before he was able to do so, he speedily relapsed. When he returned to Louisville it was to die. The red corpuscles on his return were reduced to one half the normal proportion, and the disease was past the stage where it was possible to do anything for him."

At the conclusion of the discussion the nominating committee announced itself ready to report, and its chairman read as follows:

President—Geo. W. Beeler, Clinton; Senior Vice-President—J. M. Poyntz, Madison; Junior Vice-President—A. M. Vance, Louisville; Permanent Secretary—S. Bailey, Stanford; Assistant Secretary—J. Y. Oldham, Lexington; Treasurer—J. B. Kennard, Lancaster; Librarian—T. B. Greenly, West Point.

Place of meeting, Lexington.

Chairman Committee of Arrangements—David Barrow.

Dr. W. M. Hannah, Henderson, and Dr. J. G. Brooks, Paducah, were added to the Board of Censors in place of the two last named in the list, whose terms have expired.

The President then read the list of delegates to the American Medical Association, as follows:

Delegates to the American Medical Association: J. P. Thomas, Pembroke; Andrew Seargent, Hopkinsville; W. H. Wathen, Louisville; L. S. McMurtry, Louisville; J. A. Ouchterlony, Louisville; A. S. Burt, J. H. Letcher, D. L. Reynolds, T. B. Greenly, B. L. Coleman, David Barrow, D. Skillman, S. S. Foss, Mathews, McCormack, S. G. Dabney, J. M. Ray, S. M.

Letcher, L. Beecher Todd, W. Hampton Caldwell.

Delegates to the Tenth International Congress at Berlin: James Lewis Howe, Louisville; J. M. Mathews, Louisville; J. A. Larrabee, W. H. Wathen, Dudley S. Reynolds, J. A. Ouchterlony.

The report being unanimously adopted, the President appointed a committee to conduct the President-elect, Dr. Geo. W. Beeler, to the stage. He was introduced, and expressed his appreciation of and thanks for the honor the Association had bestowed upon him.

The scientific exercises were resumed by the reading of a paper on "Lithemia and Uric Acid Diathesis in Affections of the Eye, Ear, Throat, and Nose," by W. Cheatham, M. D., of Louisville. (See page 333.)

DISCUSSION.

Dr. S. G. Dabney said: "I do not know of any pathognomonic symptoms of rheumatic sore throat. I was in hopes the doctor would say something in reference to rheumatism in relation to diseases of the eye. Probably fifty per cent of the cases of plastic iritis are due to rheumatism. We are all familiar with the tonsil troubles that attack people of the rheumatic tendency.

Dr. W. H. Wathen, of Louisville, in presenting several pathological specimens as illustrative of the various conditions demanding laparotomy, took occasion to speak as follows:

"I wish to present to this Society a few pathological specimens supplemental to the report made on this subject yesterday. I will only briefly relate the history of the cases and the results.

"A young married lady from the central part of the State applied to me some months ago, suffering from disturbance in the pelvis that had been annoying her for five years, growing worse, and making her at the time she presented herself nearly a confirmed invalid. She was frequently confined to her bed. She suffered torturing pain on the slightest exertion, and had decreased in weight from a hundred and thirty or forty to about ninety pounds.

"Laparotomy was done, the ovaries and tubes exposed, and found non-adherent but

cirrhotic. They were removed as close as possible to the uterus, the wound closed within three or four days after the operation, and the woman expressed herself as freer from pain than she had been for several years. She left the city for her home in two weeks, and has now gained ten or fifteen pounds. Menstruation has never returned. She has had some of the nervous manifestations that usually occur at the menopause.

"Case 2. Here is a specimen removed from a lady whose home is in Michigan. She had been an invalid since before she was married. She had borne two children—one about eight months before the operation. She suffered intense pain in the pelvis; rectal disturbance to a degree requiring operation for fissure; painful micturition; great nervousness, sleeplessness, and disturbed digestion; in short, she was a confirmed invalid. The rectum was examined and found free from trouble, as was also the bladder and urethra.

"Laparotomy was done at Norton Infirmary, both tubes and ovaries being removed, the right at the time of operation being three or four times its normal size, prolapsed with the tube into Douglas' pouch, and contained an abscess. The left ovary seemed almost normal, but, as a second operation is usually called for if one is left, I removed it also. The woman recovered promptly without a bad symptom, and has now gained twenty or twenty five pounds.

"Case 3 is a laparotomy I did only a few days ago. My friend, Dr. Grant, referred a woman with a tumor to me. It was impossible to make out the character of the difficulty. She had been suffering four or five years from pain, and for three years past had not been free from suffering. She was anxious to be relieved, and readily consented to an operation, which was made last Tuesday a week ago. The tumor was found to be adherent over two thirds its extent and a dermoid cyst in character. In this case I used a drainage tube. She did not lose more than an ounce or two of blood, but I was afraid a little of the contents of the tumor had escaped into the cavity. Irrigation was resorted to, and the tube remained in position thirty-six hours.

"Case 4, I referred to yesterday, is an hysterectomy for carcinoma done about a year and a half ago. This woman had no untoward symptom after operation, and left the infirmary on the nineteenth day. She at once gained twenty or thirty pounds, and continued this way about a year, when she again presented herself with the disease recurrent on one side. It had then extended beyond reach, and the difficulty is now constitutional. She is still living and attending to her domestic affairs. After the operation she began almost immediately on her return from the infirmary having sexual connection with her husband, though she informed me that she experienced no pleasure from the congress. In this case all the diseased structure was taken away.

"Case 5 was published two months ago in the New York Medical Journal. The operation was done in December, after a diagnosis of extra-uterine pregnancy at three and a half months. The woman had been exhibiting all the symptoms of pregnancy in an exaggerated degree. She had great disturbance of the bladder and rectum.

"The operation was done and the diagnosis confirmed. A pregnancy existing in the fold of the right broad ligament, with the placenta adherent to Douglas' pouch, to the pelvic structures on the right side, and behind the uterus.

"The placenta and membranes were readily separated, and the broad ligament ligated, the abdomen flooded, dried, and closed without a drainage tube. The hemorrhage was slight. The woman had no shock, pulse of 75, and no untoward symptoms from the operation.

"When the adhesions were being separated, it was observed a coil of intestine was adherent to the right side. The uterus was pressed up and also adherent. The intestine was not interfered with, but the others were broken up. A few days after the operation this woman had a terrific diarrhea, watery discharges, and passed quite a number of large, white, round worms. There was an enlargement in the left broad ligament which caused her considerable pain by pressure upon the bladder and rectum. This enlargement was apparently an hematocele. In a couple or three weeks the woman began having some fever; there was no fluctu-

ation discernible by vaginal, rectal, or abdominal palpation. Finally the hematocele ruptured into the bowel and a great quantity of disorganized blood came away by the anus. The woman, of course, from that time made a tedious recovery.

"The specimen presented is probably as beautiful as was ever removed from a living subject. It offers another evidence that extra-uterine pregnancy begins in the tubes and ruptures into the broad ligament, with consequent hematocele suppuration and rupture into the peritoneal cavity and death, unless laparotomy is done.

"In conclusion, the only treatment that is justifiable in extra-uterine pregnancy, in any stage from the time it is known to exist up to full term, is laparotomy. I wish to place myself upon record as absolutely and unqualifiedly opposed to electricity to destroy an ectopic pregnancy, for the reason that if you destroy the life of the fetus you leave the subject's life in constant danger.

"When laparotomy is carefully done, recovery will be the rule, and death the very rare exception."

DISCUSSION.

Dr. A. C. Bernays, of St. Louis, said:

"The justifiability of hysterectomy has been questioned, and, as usual in questions of this kind, the solution has been given by the Germans, who discovered that when cancerous degenerations of the vagina and cervix exist and are removed, there soon recurs cancerous deposits in the mucous membrane of the body of the uterus. This specimen is a case in point. It shows the cancerous invasion of the growth into the mucous membrane of the body of the uterus above the internal os, and no operation of amputation, however high, could have included this whole disease. The cancer would have been left, and the conclusion is evident. The rule should be, as soon as a diagnosis of cancer of the uterus is made, no matter if it is not larger than a pea, then that woman's uterus should be removed. The statistics of the mortality of recent operations show only six per cent of fatalities. I should like to go on record even more radically than that. Statis-

tical examination ought to show the heredity of the disease. A woman has no use for the uterus after the menopause; and now suppose we could show when a woman has reached forty-five years of age that her aunt, or her cousin, or her mother ceased to menstruate at about that period, and that shortly thereafter one, or both, or all of them suffered from cancer of the womb. Would there be any good reason why that woman's womb should not be removed? Would there not exist good reasons why it should?"

Dr. McMurtry, of Louisville, said: "I wish only to allude to the case of extra-uterine pregnancy reported. There are cases that die every year with the vague history of peritonitis and cellulitis that are sometimes attended by hemorrhage or severe collapse. We have only recently learned how to deal with them, and that is surgically. The uterus is generally about as much enlarged as if it had been normally impregnated."

The report on "Otology," by S. G. Dabney, M. D., of Louisville: (See page 337.)

Dr. A. M. Vance, of Louisville, read on "Wound Drainage:" (See page 341.)

DISCUSSION.

Dr. A. C. Bernays said: "The question of wound drainage is one that has recently been very much thought about and discussed. It has been claimed by one party that the object of the drainage tube is to serve as a sewer through which bacteria might drain away from the wound. By bacteria I mean all sorts of pus or ptomaine-producing organisms that result in its formation. I can not agree with that position. It seems to me that, theoretically at least, we must maintain that we can make some wounds aseptic. Take, for instance, a patient who has a wound of the surface, which is easily accessible, and who has no fever. I think we must mean that that kind of wound can be kept aseptic. The great point about asepsis, however, lies in this, that formerly we tried to disinfect the air; then we laid the greatest stress upon the purity and the disinfection of the wound by means of running through it quantities of aseptic, poisonous solutions; to-day we do not use these antiseptic solutions.

At my last visit to Bergmann's clinic, nothing but water was used—sterilized water.

"We know that we can disinfect our hands and instruments and the surface of the skin upon which we are to operate. The point of difference is in the transference of sterilization from the air and the wound to the patient and to ourselves.

"Geo. M. Sternberg, of the army, has shown that disease is introduced into wounds by our fingers and instruments, not from germs that float in the air. They live under our finger-nails; we pick them up on our rounds from patients with erysipelas or suppurating wounds. Since our attention has been transferred from wounds and concentrated on ourselves and our instruments, antiseptic surgery has gained ground.

"Theoretically, we ought always to know when a wound is aseptic, but practically we do not; hence the necessity for drainage.

"There are certain kinds of wounds that will always require drainage; for instance, when we have a so-called dead space or a cavity filled with air; in such wounds where, for instance, you chisel out a strumous or tuberculous bone where the sides of the wound can not be approximated. In such cases two methods of treatment have been suggested, one by means of a blood clot, after the method of Shroeder, which, if a wound is aseptic, ought to become organized without a drop of pus; or, as is usually resorted to, because of uncertainty of aseptic conditions existing, by means of drainage."

(CONCLUDED IN NEXT ISSUE.)

Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Professor Hacket, who has made many experiments with kola, states that, contrary to the assertion of Dr. Germain Sée, caffeine is not the only active principle of the kola nut. It also contains a red substance to which he has given the name of "kolaine." This substance prevents rapid waste of tissue during fatiguing exercise, while the caffeine with which it is combined stimulates the muscles. The kola nut was experimented with during

the autumn maneuvers of last year with such success as to lead the German war office to order no less than thirty tons of the nut for consumption in the German army.

From recently obtained results hydrochlorate of orexin appears to be a genuine stomachic, not only having the power of improving the appetite, but of strengthening the digestive functions. The compound was given for loss of appetite from most various causes, as from severe operations—the success of which often depends upon whether the patient eats or not—from tuberculosis, and from a few diseases of the stomach (wherein, as a whole, the irritating though absolutely non-corrosive action of the compound on the mucous membranes does not favor its use). It was further tried in cases where the loss of appetite evidently hindered the recovery or improvement of the patient, or where it was the only appreciable symptom of the illness. As a matter of course, the effects of "suggestion" were excluded by avoiding all mention of the expected results. In all, the cures numbered thirty-six, in only five of which it is stated the effect was not conspicuous and even astonishing. The appetite did not, as a rule, appear so soon (within a few hours) as was observed with the healthy provers. Commonly several doses were given for a few days. Sometimes, however, from a single dose the effect suddenly appeared after an interval of one to several days. In such cases the connection of cure and effect was not so clear. Yet the anorexia had generally lasted so long previously that even its "accidental" disappearance two days after the administration of orexin was very remarkable. Unpleasant subsidiary symptoms were seldom seen from suitable doses. In one case a burning sensation was felt along the esophagus; this was thought to be caused by the compound escaping from the capsule and coming into direct contact with the mucous lining of the passage. As a rule, a single, and at most a once repeated dose of 5 to 8 grains, given at 10 A. M., was sufficient. If no effect was produced, the dose was increased to 7 or 10 grains daily, and eventually to 5 to 8 grains three times a day; 24 grains *pro die* was not exceeded. If, after four or five days, the expected result was still absent,

the treatment was dropped for a few days and then again resumed. The remedy was prescribed in gelatine-coated pills, and each dose was accompanied by a cupful of broth.

At the last meeting of the Royal United Service Institution Dr. J. Lane Notter read a paper on the "Sanitation of Barracks." After dwelling at some length on the importance of building on suitable soil, Dr. Notter went on to urge that barracks should not be erected in crowded cities, that they should have a zone of aeration around them, and be exposed to plenty of sunlight. Barrack rooms were, as a rule, very badly lighted, and a recruit giving much time to reading would probably injure his sight. The gas fouled the air, and the sooner the electric light was introduced the better. Fifty years ago there were 14 deaths in 1,000 from phthisis among the Foot Guards, and only 3.4 per 1,000 among the civil population; but that state of things had been remedied, and now the comparison was four civilians to three soldiers of the same age. With regard to the water supply, of sixty-three samples submitted to him for analysis last year at Netley, twenty-nine, nearly all procured from wells, were unfit for use. In conclusion the lecturer claimed that the Army Medical School had done good work in promoting sanitary progress in the army. Mr. J. Ernest Lane, speaking of the diagnosis of urethral chancres, said the diseases with which they might be confounded were chancroids and gonorrhea. Chancroids, however, were seldom if ever confined to the urethra, and the diagnosis might be arrived at by inoculations conducted upon the patient, and by the fact that while the chancreoid was essentially a destructive process, the chancre was a small-celled infiltration which, in this situation, was seldom attended with any loss of tissue. With regard to gonorrhea, a urethral chancre might be distinguished by the induration of the inguinal glands, and the dorsal lymphatic of the penis by the nature of the urethral discharge, and by the acute and localized pain during micturition. Mr. Lane considers that tannate of mercury in doses of one or two grains with a little opium gives the best results in the treatment of primary syphilis, as the patient

is rapidly brought under the influence of the drug, while his digestive system is not upset.

Sir James Paget occupied the chair at the twenty-fifth festival dinner for the benefit of the Royal Medical Benevolent College at Epson, held in the White Hall Rooms, Hotel Metropole. Earl Granville was among the guests who, to the number of about 250, were thoroughly representative of the profession of medicine, comprising among others Sir Andrew Clark, Sir T. Crawford, Sir Ed. Sieveking, and Mr. Jonathan Hutchinson. In an eloquent speech pleading the cause of the institution, the chairman referred to its dual function of affording education to students and bestowing annuities on members of the profession or their widows, who, in their declining years, have been reduced to want. He eulogized the attention paid to physical training not only for the benefit carried to the body, but for its moral effect, and all moral aids were to be welcomed; for in medicine, as in other professions, dishonesty would often secure ill-gotten gains.

In the April number of the "Fortnightly Review" will be found a very strong indictment of the Royal College of Surgeons, drawn up by Sir Morell Mackenzie. It would appear from the article that most things are wrong in that unfortunate institution, its government, its internal administration, its official acts, and the relation of its officers to the general body of members. The college is declared to be "practically in the hands of metropolitan hospital surgeons," and "little more than a huge shop for the sale of surgical licenses." It has not promoted the study of surgery, it has not encouraged students to resort to its library or its museum for purposes of self-instruction, and it has not even rightly administered its own funds. Above all, it would seem to be a very close corporation indeed. From all these and many other iniquities, the article hopes that the institution may be delivered through the agency of the bill which is shortly to be introduced into the House of Lords by the Earl of Dunraven.

An anonymous donor whose attention was attracted to some sick children suffering from chronic diseases who had been sent home from

one of the Birmingham hospitals to make room for more urgent cases has given a sum of £1,000 to the Birmingham Children's Hospital to be expended in maintaining a special cot where such cases may be treated until completely cured.

The Royal Society after consultation with the Government has appointed a committee on color blindness, which includes many well-known scientific experts.

LONDON, April, 1890.

Notes and Queries.

AMERICAN MEDICAL ASSOCIATION. — The forty-first annual meeting of this National Medical Society had its being May 20th, 21st, 22d, and 23d, in Nashville, Tenn. A glance at the report shows that a meeting of average interest was held, with a little additional spice in the way of a convention looking to the much needed reform in medical education. The pressure of State Society matter upon our columns forbids for this issue any extended notice.

In our next we shall give our readers a condensed report of the proceedings.

The friends of Dr. W. T. Briggs will be glad to learn of his election to the office of president, a place which he has well earned by years of devotion to the best interests of the Association.

NEW YORK PASTEUR INSTITUTE. — Dr. Paul Gibier, Director of the New York Pasteur Institute, 178 West Tenth Street, begs to inform you of the results of the preventive inoculation against hydrophobia performed at this Institute during the month of March, 1890. The Institute was opened on the 18th of February last.

From the 20th of February to the 31st of March about thirty persons came to be treated; only nine were detained; the animals who bit the others being still alive, no further infection was therefore to be feared.

Nine persons have received the Pasteur treatment and are at present in good health.

In three cases hydrophobia was experimentally shown to exist (inoculation of the nervous substance of the dogs to other animals who

died with the ordinary symptoms of hydrophobia), and also by this fact, that in one case a horse, and in another case a hog, bitten by same dogs, have since died from hydrophobia.

In six other cases rabies was very probable, but the dogs disappeared or their bodies were thrown away without being sent to the Institute.

The patients were, four from New York City, three from Long Island, one from Maryland, and one from Arkansas, of whom five were treated gratuitously.

Moreover, in order to be protected against the fatal danger of an accidental infection during the work, Dr. Paul Gibier has inoculated himself and three of his assistants.

A WRITER in the Provincial Medical Journal refers approvingly to the Eastern custom of anointing the body with oil.

We heartily coincide with the author's recommendation of these oleaginous inunctions in the case of infants and weakly adults. Many affections of the skin in infants are chargeable to the use of soap, and the substitution of oil is advantageous. But when the author recommends the oil of mustard for rubbing infants we must enter our protest. Many years ago we gave a pre-crispion for liniment, containing a little oil of mustard, to an old woman with rheumatism. The result was beyond our expectations. On our next visit we found her so much improved that she was quite able to get around the room with ease—in fact, it required all the agility of an earlier day to enable us to reach the door slightly ahead of the woman and her broomstick; while the epithets which she heaped upon the embrocation savored of another but not a better world. Oil of mustard, as dispensed in American pharmacies, is a drug of which a very little produces a powerful effect.—*Times and Register*.

AN effort recently made to ascertain the opinions of a number of leading physicians upon the subject of the admission of women to the classes of medical colleges, heretofore exclusively occupied by male students, showed an overwhelming majority in favor of the mixed classes.—*Ibid*.

The American Practitioner and News

"NEC TENUI PENNÂ."

Vol. IX. SATURDAY, MAY 24, 1890. No. 11.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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KENTUCKY STATE MEDICAL SOCIETY.

The recent meeting in Henderson seems to have been a success in all points that go to make successful the annual reunion of the Kentucky Sons of Esculapius.

As hereinbefore intimated, the programme was somewhat too plethoric for graceful performance; but it was let blood *secundum artem* by the able executive, and made its entrances, deliveries, and exits in good style to the credit of the guild. To drop metaphor, several papers that were advertised did not materialize, and a good number were read by title, but most of them were read in full text. That they dealt with live issues is attested by the very live discussions which they drew from the Fellows. The address of the President and discussions to the end of the second half-day, with five of the papers read, are contained in this issue. That the journal might fit the exigency, some eight or nine extra pages have been added to the present number, while a delay of a week in the issue was unavoidable. Our next issue will complete the report of the work, while the papers, some eighteen or twenty of which we have secured, will appear in the next and subsequent issues as space will permit.

Our best thanks are here extended to the authors for the unanimity with which they have put papers and abstracts at our disposal.

The sessions were devoted almost exclusively to scientific work. Few measures of polemic or political character came to the surface, and these were summarily disposed of without bump or friction.

The address of the President, delivered on the night of the first day, was the literary event of the meeting. It sets forth in classic language the achievements of Kentucky's pioneers in medicine. We are glad to be able in this issue to present our readers with the full text of this valuable contribution to the history of Kentucky Medicine.

The time-honored banquet passed, it is said, with somewhat abated zest. The verdict as to whether it was a brilliant success or not is mixed, and varies perhaps according to the personal bias of the participant. That the viands were above criticism all are agreed. But it has been hinted that the bibulosity of the *menu* were lacking in a certain ingredient, which is the determining cause of, if not the essential etiological factor in, Kentucky oratory. Be this as it may, the rhetorical flights of the Fellows on this occasion were either too high or too heavy for the reporter, and therefore do not appear in our report. The selection of officers for the ensuing year was well made, and augurs well for the coming session. In Dr. Beeler the Society secures an able executive, and confers its highest honor upon one of its most worthy members.

AMERICAN SURGICAL ASSOCIATION.

Since our last issue the regular annual meeting of this representative body of American Surgeons has had its day in Washington, D. C. For obvious reasons we can now present our readers with nothing from this mine of scientific lore.

This journal enjoyed the exalted honor of having its senior editor elevated to the presidency of the Association. His classic address on Kentucky Pioneers in Surgery has already appeared in the daily papers and numerous medical journals, and has doubtless been seen by many of our readers. Nevertheless, we shall issue it in full text in the near future.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., JUNE 7, 1890.

No. 12.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

THE OPHTHALMOSCOPE AS AN AID IN THE DIAGNOSIS OF SOME DISEASES OF THE CENTRAL NERVOUS SYSTEM.*

BY J. MORRISON RAY, M. D.

Eye symptoms, the result of organic disease of the central nervous system, are of two varieties: first, changes in the optic nerve and retina; second, affections of the motor nerves of the eyeball. In recent years attention has been drawn to reflex eye diseases from functional nervous disturbances, but as this question is still *sub judice* its extensive discussion does not come within the scope of this paper.

Researches in cerebral localization have brought the study of eye symptoms in central disease into much prominence, and investigation has proven the eye phenomena to be of much importance. But as I do not wish to take up a study of all the eye symptoms possible from intra-cranial and spinal mischief, suffice it to say that they are noted principally by such symptoms as paralysis of one or more of the recti muscles, change in the pupil, or accommodation, disturbances of the field of vision, or deviations of the eye without paralysis. Such symptoms should always be looked for in suspected disease of the nerve centers, and if found they are of great diagnostic significance. Swanzy, in the Bowman lecture for 1888, says the greatest difficulty to be overcome in attempts at localizing lesions in the brain from an ex-

amination of eye symptoms is due to the fact that the symptoms may be from direct disease at the center presiding over the part involved, or they may be due to indirect effect from disease at a distant point. With our increasing knowledge of cerebral physiology these phenomena will eventually be more thoroughly understood. Changes in the optic nerve and retina, as a result of cerebral or spinal changes, are the ones I wish particularly to emphasize, since they are often the first and sole evidence of the existing intra-cranial lesion. With the introduction of the ophthalmoscope there was brought to our view the only cranial nerve that, under physiological conditions, is possible of inspection. Thus we have a method of direct examination of parts that may be looked upon as projected cerebral substance. The optic tracts from their double root of origin in the tubercula quadrigemina and optic thalami to their partial decussation in the chiasm are extensively connected with the brain and its membranes. Their blood supply when they become optic nerves is from the internal carotid, and the sheath of the nerve is derived from the dura mater. Therefore when the optic nerve penetrates the eyeball and is presented as the optic disc, and spread out into the retina, one can fully understand that changes in its structure or circulation may be a symptom of much import to parts within the cranial cavity. Experience has taught us that the ophthalmoscope does not give evidence of every passing disturbance in the cranial circulation, nor does it show the effects of functional derangements. Yet there are but few cases of gross lesion in these parts which do not give rise to changes in the optic nerve or retina. Every one competent to make an ophthalmoscopic examination sees cases in which its use is of the greatest value as a diagnostic aid, and thus to empha-

*Read at the May meeting of the Kentucky State Medical Society, 1890.

size its value I bring the subject before you and illustrate it by a few recent observations of my own.

Mrs. O., aged fifty-one, I first saw in March, 1889. She had been suffering from intense headaches, principally occipital, for five months. Dr. Ewing Marshall examined her, but concluded that the headaches were from the eyes, and advised her to consult me. Recently, during these headaches, she had suffered from vertigo and dimness of sight. Her vision was found to be $\frac{20}{60}$ with +2.50 D., showing hypermetropia; with the ophthalmoscope the optic discs were found enormously swollen and projected forward so that their summit was hypermetropic 6 D in right eye and 7 D in the left. The margin of the swollen nerve ended abruptly so that the surrounding retina could not be seen with the same lens, and showed marked parallax when the eye was slightly moved. The swollen nerve was fuzzy, the blood-vessels covered with an exudate, and no hemorrhages. The surrounding retina was not involved in the process. Her general health, excepting the headaches, was good. She still menstruates regularly; no paralysis or other evidence of nerve disturbance. She was annoyed a great deal at night from frequent passages of urine, but no involuntary escapes. The urine was examined, but beyond a low specific gravity, accounted for by the increase in quantity, nothing was discovered. Dr. Cecil examined the local condition, but found nothing to cause the incontinence. In July her headaches had much increased, the vertigo was worse, and she suffered much from attacks of transient blindness, which would often last for an hour or more. A second examination of the urine was made by Dr. Schoenle, now one of the internes at the City Hospital. He reported that he found a trace of albumen, but no casts. In January, 1890, she was confined to the bed for two weeks with vertigo and transient blindness, during which attack for four days there was aphasia.

April 20, 1890. The optic nerves were still enormously swollen, but the surrounding retina healthy, vision now $\frac{20}{70}$ for each eye. Trouble in retaining her urine still present, especially at

night when in a recumbent position. The attacks of blindness occur several times a day, so that she is afraid to go out alone. An examination of the urine was made for me by Dr. Simon Flexner. He reports $9\frac{3}{4}$ pints in twenty-four hours; specific gravity 1010; a trace of albumen with hyaline casts large and numerous. Appetite still good, and no paralysis. From the examination of the eyes in this case I diagnosed cerebral tumor; and while this has not yet been verified, I think from the history the diagnosis is correct.

Double optic neuritis occurs in about four fifths of all cases of tumor of the brain. In this case there was an enormously swollen disc, without involvement of the retina, and for eighteen months no evidence of kidney trouble. The excessive quantity of urine passed first led to an investigation, and for a long time nothing of any importance was found. Gowers says that rarely polyuria and albuminuria are present in lesion of the brain; if so, the lesion involves the medulla oblongata or pons. Plain choked disc without retinal involvement occurring in both eyes is evidence of intra-cranial pressure. Gowers says marked swollen disc in both eyes is almost surely due to tumor. If due to meningitis, the swelling is less. Swanzy says cerebral tumors are usually present when the papillitis is of an intense kind. Noyes states that in the great majority of instances of choked disc, both nerves being involved, there is an intra-cranial lesion. Here then is a case in which the diagnosis of a cranial lesion was made solely by the ophthalmoscope. The only evidence of gross organic change in the brain is visible by an examination of the eye. Soelberg Wells says any mass of exudate in the cranial cavity will give rise to choked disc. A few years ago I saw a child with double choked disc that was due to tubercular meningitis. Most of those in my experience in which the disease is traceable to meningeal trouble, I have found the optic nerve atrophic. An example of this kind is a child, aged nine years, who had measles a few years ago. Six months afterward the eyesight began to fail, and an examination showed advanced atrophy of both optic discs. There was a history of high fever and head symptoms ac-

companying the measles. The diagnosis was plainly an atrophy from localized basilar meningitis, involving the optic chiasm, and, by the cicatrization and pressure that followed, degeneration of the optic nerve fibers, visible at their intra-ocular end.

Such sequelae of measles are uncommon, yet I have encountered several cases, and believe it much more common than an examination of the literature would lead us to believe. Atrophy of the optic nerve is also a sequela of cerebro-spinal meningitis. A case of this kind was presented to me in Grace A., who was brought to me by her mother from Todd County. There was total loss of sight from atrophy of optic nerve dating from an attack of endemic, cerebro-spinal meningitis two years ago. These two cases plainly show that in cases of blindness, especially in children, where there are no external causes, an examination with the ophthalmoscope will show atrophy of the optic nerves, with a history of an attack of fever, delirium, and other head symptoms, thus pointing to a meningitis at the base as the cause.

After excluding disease of the brain and its membranes, there yet remain many cases, particularly of optic nerve atrophy, in which we are unable to find the exciting cause. A few of these are traceable to causes other than the nervous system; for instance, to alcohol, suppressed menstruation, syphilis, etc; but I am convinced that the majority are the precursors of spinal sclerosis. *Tabes* furnishes a large portion of cases of optic nerve atrophy. Gowers says one in every ten of *tabes* have optic nerve disease. When present it is one of the earliest symptoms. This is illustrated by the case of Mr. H., a German, aged thirty-eight, who consulted me three years ago. I found atrophy of optic nerve, but from a careful history was unable to find its cause. One year ago he developed ataxic symptoms, and now is the subject of typical locomotor ataxy.

I have thus briefly epitomized some of the eye symptoms in diseases of the central nervous system. In such cases the physician who uses the ophthalmoscope has the advantage of not groping in the dark in search of the diagnosis, but is able to testify to what he sees; as

Loring graphically describes it, he is able to read, as if in a book, the written troubles of the brain. Not relying on the ordinary signs of brain disturbance, but by the employment of the ophthalmoscope, he is able to give an opinion with a precision that is calculated to excite the wonder and admiration of his associates.

LOUISVILLE, KY.

ACUTE INTUSSUSCEPTION OF THE INTESTINE.*

BY J. O. JENKINS, M. D.

Medical literature is so replete with facts concerning intussusception that it is almost superfluous to offer more upon the subject, especially as it has been handled in such a masterly manner by Treves, of London, Eng., and Senn, of Milwaukee. The very abundance of material information also makes the task more difficult, in that it is sometimes hard to collate and arrange to agreement the varied thoughts of the many eminent writers on the derangement. As the victims are most commonly those of tender years, the disorder is of melancholy interest, well calculated to excite the deepest pity and commiseration from the physician and friends.

Numerous causes operate in the production of an invagination of the intestine, the most prominent ones being: the loose attachment of the intestine in the right inguinal region, blows on the abdomen, hard fecal masses, the passage of some irritating material through the ileo-cecal valve, stricture of the intestine, straining at stool, violent muscular efforts, surgical operations, and intestinal catarrhs, the latter operating most frequently. Especially is this true in infancy and childhood, when the greatest number of cases occur. There are also good reasons for supposing that an inflammation in the neighborhood of the ileo-cecal valve or certain other portions of the abdominal cavity, by reason of the exudation encroaching upon and altering the caliber of the bowel and embarrassing its integrity of action, may prove a very serious factor in the production of the disease. By some one of these means the nor-

*Read at the May meeting of the Kentucky State Medical Society. (For discussion, see page 383.)

mal rhythmic movements of the muscular fibers of the bowel are changed into an abnormal spasmodic peristalsis, which allows the constricted portion to insinuate itself into a portion of normal dimensions, the circular fibers constricting while the longitudinal urge the mass onward. If we examine the anatomy of the bowel we find the reason for an invagination taking place at the cecum, it being at once the shortest as well as the broadest and most capacious division of the intestinal tube except the stomach.

No circular fibers are to be found in the muscular coat, and a condition of normal invagination of the ilium from the unopposed action of the longitudinal fibers affords ample reason for the frequency with which the small bowel is found entering the colon. "After the peritoneum and longitudinal muscular fibers have been cut, traction on the ilium causes the protrusion into the cecum to disappear, and the ileo-cecal joining is seen to be a round hole with no valvular appearance whatever. The protrusion of the circular fibers of the ilium into the cecum normally is offered as one of the reasons why intussusception so commonly commences at this point." (L. McLean Tiffany, *Reference Hand-Book Medical Science*.) "Dr. von Basch holds, from experiments on the rectum, that the longitudinal fibers of the intestinal wall can, under certain circumstances, actively dilate the bowel and thus produce an aspiratory effect. Owing to pressure being thus lowered, the mucous membrane above may be drawn down and thus produce an intussusception." (*American Journal Medical Science*, vol. 91, 1886.) In four instances the trouble has been induced by the weight of malignant growths. Barker has reported one case, Verneuil two, and Hulenkamp one. There is a marked preference shown for the male sex, more than 66 per cent of all reported cases being males. Just why this sex should be selected in such a large percentage is not easy to determine; there really seem to be no valid anatomical or hygienic reasons for the fact. Age also plays an important part in the history of the accident, no less than from 70 to 80 per cent of all cases being younger than twelve years, and of these 62 per cent have not

passed beyond the first year. "At the Stockholm Hospital for the Relief of Children, in 1,046 autopsies made on children who had passed the first year of life, only two cases of intussusception were found, scarcely 2 per cent, while in 4,649 autopsies on those under the first year, eighteen cases (about 4 per cent) multiple and single cases of the accident were found." (Ribbing, *Archiv of Pediatrics*, January, 1890.) Of six cases coming under my care since 1880, four have been males. All were under twenty, and five were younger than ten years. Perhaps an explanation for its happening so often in childhood is found in the fact that at this period of life the digestive apparatus of the body is especially active, and is undergoing a more rapid and greater development than at any other time, and is consequently more susceptible of grave results following slight disturbances of the economy. Also, the nervous system of a child is very easily thrown into disorder, and digestive troubles ensue, which may finally end in increased peristalsis of the intestine and an invagination. Roughly considered, the abdomen and pelvis in childhood may be likened to an inverted cone, the base of which is the diaphragm, the abdominal walls and spine being the sides, and the pelvis the apex, with an outlet, the anus. The infantile pelvis is also much straighter than in the adult. The inherent desire of a child to eject its discharges with a single effort causes it to strain forcibly when emptying either its bladder or rectum, and by creating the necessary tension of the muscles of defecation and micturition brings an immense power into play at the weakest point of the cone. This action very frequently produces a prolapse of the rectum, or, next in frequency, an invagination at the ileo-cecal junction. A parietic condition of one or more portions of the intestinal tube may permit the paresed circle to slip forward into the healthy portion, and thus the intussusception commence.

Hirschsprung (*Archiv of Pediatrics*, January, 1890, Vol. 3, No. 25) declares that invagination is a very rare occurrence in children, though more frequent than any other variety of obstruction. In the course of six-

teen years he had seen twenty-seven cases of it. Meigs and Pepper also speak of its comparative rarity. Rillet, in 1852, gives four of his own and four collected cases; Pilz, of Stettin, one; Leichtenstern and Wiederhofer each one; the latter being able to collect fifty-eight recorded cases. Barrier and Billard had never seen a case. Charles West had seen but three or four cases of it. Raymouand agrees with Hirschsprung that the complaint is rare in France, as in a practice of thirty years he could recall only three cases. In 1882 Ribbing searched Scandinavian medical literature, records of clinics, hospitals, and pathological institutions, as well as receiving reports from his *confrères*, and was able to collect forty cases, nineteen of which ($47\frac{1}{2}$ per cent) were in children under one year. The same author concludes that though intestinal invagination is relatively common in Denmark, it is extremely rare in Sweden. The Danish medical literature since 1801 contains quite a large number of recorded cases, and the conclusion that it is more frequent in Denmark than elsewhere is to be regarded as trustworthy.

Dr. A. Jacobi, of New York, referring to the small number of cases mentioned by Meigs and Pepper, thinks with them that the publication of a larger number of cases is necessary to reach conclusions in regard to the condition. He had seen at least twenty cases since 1856.

The accident is divisible into four distinct varieties, according to the part of the intestine affected. They are ilium into ilium (15 per cent of all cases), or where the serous layers of the ilium lie in contact; ilium into cecum (60 per cent of all cases), in which the serous coat of the ilium is opposed to that of the colon; colon into colon (15 per cent of all cases), where the reflections of the serous surfaces are entirely of the colon, and colon into ilium, a rather rare mishap, forming only 10 per cent of all cases. In the prognosis the first variety is the most fatal, and the colic least so; the second and third are the most easy of reduction, and also furnish the greatest number of cases. Many causes serve to make an intussusception a very fatal accident. Medical aid may have been summoned too late to render the patient much service, or the physician in

the early part of his attendance may attribute the symptoms to colic or some minor digestive disorder, and consequently fail to recognize the gravity of the illness. Again, energetic domestic treatment may have done so great a damage to the patient that the physician's only duty is to mitigate the suffering and allow death to take place as painlessly as possible. The vital powers are also very rapidly reduced from shock and intense suffering as well as from interference with nutrition. As a rule, the symptoms are developed suddenly, either as a primary affection or as a complication of some other intestinal derangement, usually of a catarrhal nature. In the former the daily discharge of the alvine passages ceases with more or less abruptness, though there is an unsatisfied desire to accomplish the usual act. After the intestine below the point occluded is emptied no flatus nor feces are voided, though the effort at defecation may cause the discharge of mucus stained with blood, the passage of which causes much pain and tenesmus. Distension of the abdomen occurs and progressively increases with the duration of the intussusception, and is due to the accumulated gases and feces. Vomiting almost always occurs, at first being merely the ingesta, but finally becomes mucous or stercoraceous, the latter being a symptom which is found only in a complete obstruction of the intestinal tube somewhere below the duodenum. Pain is always a prominent symptom in an intussusception, and is of a spasmodic paroxysmal character, and becomes more and more intense until the stage of collapse, when it frequently ceases entirely. It is located most generally at the site of the invagination, but may be experienced in the neighborhood of the stomach or umbilicus, and is due to the violent spasmodic contraction of the circular fibers and to general or localized peritonitis. A tumor of varying size and location is generally capable of demonstration, and when present feels to the hand softer than either a malignant growth or a fecal impaction; it is movable and painful when manipulated. It has been asserted that if there is an increase of uro-indican in the urine, the urinary discharge being somewhat suppressed, the intussusception will be found

high up in the intestinal tract. With an intussusception low down, very little reduction in the quantity of urine is noticed, though there may be considerable irritability of the bladder manifested. If an intussusception is secondary to a diarrhea or catarrh of the intestine, the prostration and suffering are correspondingly augmented and death may occur very rapidly. While visiting in the interior of the State in 1881 the following cases came under my notice:

CASE 1. John T., male, aged nineteen, June, 1881. Found him lying in a field at noon exhausted from a diarrhea which had continued about fifteen hours. Sent him home, a distance of over a mile, and advised some domestic remedies for the diarrhea. Was sent for at 10 o'clock the same evening. The diarrhea had stopped somewhat suddenly early in the afternoon, and though attempts at defecation were frequent, bloody mucus only was discharged. There was some vomiting and hiccough, and the belly was greatly distended. A tumor the size of the fist could be felt and seen lying between the crest of the right ilium and the liver and in the course of the ascending colon; it was slightly movable and not very tender. Realizing I had probably an intussusception in the ascending colon to deal with, large quantities of tepid water were injected into the bowel, hoping thereby to force a dislodgment of the invaginated part, the injections of water being finally substituted by those of weak tobacco infusion. Collapse set in, however, and death occurred at 2:30 A. M. *Post-mortem* was refused.

I do not believe the intussusception took place before 3 o'clock P. M., for previous to that time there were no symptoms of it. A timely laparotomy might have saved the patient, for he was healthy and rugged, and of good constitution and vitality.

If the ilium is invaginated into the colon and the ileo-cecal opening remains pervious and occupies the lowest portion of the intussusception, stools of normal character and regularity will be discharged. There will also be but little or no vomiting or tympanites, as was the fact in the following:

CASE 2. Albert B., male, aged five years; was

first seen April 28, 1886. He had been suffering with colic for the last three weeks; bowels regular and motions natural; temperature and pulse normal, appetite good, but bolts his food without chewing; abdomen soft and pliable; no tympanites nor vomiting; a tumor about three inches in length, on a level with and to the left of the umbilicus, was movable and not very tender. Calomel in small doses was given, which had the effect of bringing away a number of hard fecal masses and causing the tumor to disappear. The child felt well, had no pain, and played for several days. He was given by a neighbor several cubes of rhubarb stalk, which he bolted, as usual; a return of the intestinal trouble ensued. Small doses of sulph. magnesia were given, and the bowel thoroughly washed out with warm water. The injections brought away hardened feces, and some relief followed, though the tumor never entirely disappeared, yet the stools were regular and normal, except on one occasion, when a small amount of pus was discharged. He had contracted whooping-cough during his illness, and died suddenly after a violent paroxysm of coughing.

Post-mortem revealed an invagination of the ilium into the colon, the invagination extending from the sigmoid flexure to a point situated to the right of the median line in the epigastric region, the ileo-cecal valve being carried forward in a patulous condition and forming the lowest part of the tumor, which lay in the upper portion of the sigmoid flexure of the rectum; it was gangrenous. A small ulcerated opening which perforated the intestinal walls existed at the site of the appendix vermiformis. There was no pus nor peritonitis except such as existed in the opposed serous coats. The several layers of the invaginated gut were adherent to each other and could not be drawn apart without rupturing them; they were much thickened.

The case was diagnosed in the first part of the sickness as one of obstipation, and liquefying cathartics given in small doses. Their use brought away an accumulation of feces, quieted the pain and caused the tumor to disappear.

Looking at the history of the case at the present time. I should be still inclined to rely

upon gentle catharsis for a cure, as I yet think that the tumor found in the earlier part of the sickness was fecal, and that the intussusception at a late period was from eating the rhubarb and also from the violent coughing.

When it is certain that an intussusception is present all disturbing or disquieting medication should cease, there should be no violent catharsis attempted; for if simple means have failed it is fatal to the patient's chances of life to administer such drugs as act with fierce energy. Irrigation of the stomach, as advised by Kussmaul, Rehn, and others, is worth trying in all cases, for it adds to the comfort of the patient by cleansing the viscus, stops the vomiting, relieves meteorism, and may even relieve the upper part of the intestine of feces, thus adding much to the patient's comfort.

Nothnagel, in discussing the treatment, recommends "absolute abstinence from food; induce peristalsis from below, stop it from above, and above all things avoid the use of purgative medicines. Opium must be given to control peristalsis, relieve the pain and prevent peritonitis." The use of injections of air, gas, oil, or water, for the purpose of distending the intestine below the seat of obstruction and forcing the intruded portion backward, constitutes a very worthy method of reduction known and practiced since the time of Hippocrates.

Numerous reported cases wherein a liberation of the invagination has been accomplished by this method attest its great value. If the injections are of fluids, the body of the patient should be inverted as much as possible, and the fluid conveyed through a long rubber tube from a considerable height, so as to acquire as much hydrostatic pressure as is safe. Should the irritability of the rectum cause the injection to be immediately returned, a few moments' rest will often induce the rectum and colon to retain what is introduced. Persistent, slow, gentle, steady effort will often accomplish what violent and ill-regulated movements fail to effect.

CASE 3. George S., male, aged four months. February 11, 1887, child had catarrhal bronchitis, and had been treated with domestic remedies; it had been given numerous doses

of castor oil "to work the phlegm down." Child coughing and crying; stools blood-streaked mucus; there was much straining, and the rectum was sometimes prolapsed. A small tumor to the right of and below the umbilicus was observed, which was painful on pressure. Diagnosed an intussusception in the colon, and inverted the child to about forty-five degrees and injected a pint of warm, soapy water, which was immediately rejected. After several trials, during which the child became quieter, I succeeded in getting a quart to remain, and felt the tumor gradually disappear. A prescription for the bronchitis, containing paregoric, was given. Before the child could be again seen it was attacked with convulsions and died. It had rested quietly, and had had one small brownish-yellow operation, without straining, which was but slightly tinged with blood. There was no sign of the tumor after death. *Post-mortem* refused.

Artificial inflation of the intestines with air or gas has of late years been brought to the notice of the medical profession by Dr. N. Senn, of Milwaukee, through the medical press, and his work on Intestinal Surgery as a means of diagnosis in intestinal injuries or pathological conditions, and constitutes a method which is daily having its value demonstrated. Perforations of the gut from injury, strictures of its lumen, and obstructions in its course have been found and accurately located by it. Dr. Senn in numerous experiments proved the possibility of passing a stream of hydrogen gas entirely through the intestinal tract from the rectum to the mouth, and that the ileo-cecal valve offered no obstruction to the flow. (*Medical News*, May 26, Aug. 25, Nov. 10, 1888).

In a paper on the Surgical Treatment of Volvulus (*Medical News*, Nov. 30, 1889) he enters more fully into the advisability of using inflations of gas before resorting to severer operations. His method of reducing a volvulus by inflation is entirely applicable to the reduction of an intussusception, especially if it is located in the colon; it is questionable, however, if much good can be accomplished in those cases confined to the ilium, because the inflation tends to increase the many doublings

of the small intestines and prevents distension beyond a certain point. Nevertheless, an inflation of air or gas is capable of doing more good in any variety of intussusception than injection of fluids, because a more equable distension of the bowels is obtained, and less irritation of the lower bowel is experienced. An elastic cushion is also formed by air or gas, which, when compressed by the expulsive efforts of the bowels, effectually prevents a further prolapse of the invaginated portion. Omitting Knagg's eight deaths from inflation, because he does not give the total number of cases in which it was used, there are reported: Bryant, 20 cases and 4 deaths; Greig, 5 cases and 1 death; Foster, 3 cases and no death; Bayliss, 2 cases and no death; to which I may add 2 cases and no death; making in all 32 cases treated by inflation, with only 5 deaths—a mortality of only 15 per cent, while the mortality of laparotomy is 74 per cent. By expectant treatment, 74 per cent; by injections of fluid, 60 per cent to 70 per cent; thus showing a percentage much in favor of inflation.

The two methods—the injection of fluids and artificial inflation of the bowel—are especially adapted to the rectification of the displacement when it exists in childhood; for greater dangers threaten those of tender years from an abdominal section or the prolonged administration of opium than adults. No fear of rupturing the bowel by an injection need be entertained, provided ordinary care is exercised.

Mr. Knaggs, however, quotes eight cases in which artificial inflation caused rupture of the intestine and death. (London Lancet, June 4 and 11, 1887.)

Dr. W. E. Forest, in an elaborate paper on Intussusception in Children, published in the American Journal of Obstetrics, July 18, 1886, gives the conclusions reached by him as the result of a series of experiments on the cadaver with a view of ascertaining how much pressure by injection or inflation the intestine would stand without rupture.

His observations were:

1. That position and manipulation, in some cases, at least, aid in forcing an injection through the ileo-cecal valve.

2. That in most cases, not in all, the valve will give way so as to permit of the passage of an injection before a rupture of the colon would take place.

3. That the valve is not the only obstacle to the passage of liquids or gas from the anus to the mouth, but that friction in the small intestine is an important factor.

4. That if an injection be given with force sufficient to cause rupture of the gut, the rupture will take place in the colon.

5. Injections can not be relied on to overcome obstructions in the small intestine.

6. That the colon, both in the child and the adult, bears a surprising amount of pressure without rupture, *a force of eight or nine pounds in the infant to twelve or fifteen pounds in the adult.*

The same author very ingenuously applied aerated water from a Vichy siphon as a reducing agent in three cases, and with complete success. Except in one case, I have since followed the suggestion offered by Dr. Forest, and can not speak too highly of his practical ingenuity. The apparatus consists of a siphon of Vichy or other water charged with carbonic acid gas, a few feet of rubber tubing $\frac{1}{4}$ inch in diameter, into one end of which is fastened a small rectal tip from a Davidson's syringe, and a rectal or other small tube having a rounded extremity and smooth surface. At a distance of about an inch and a half from the distal extremity of this latter tube, a shoulder two inches in diameter should be made by winding a roller bandage tightly around the tube. When occasion requires, slip the end of the rubber tubing over the siphon spout and fasten firmly. Connect the tip of the Davidson's syringe and the rectal tube, which insert into the rectum as far as the shoulder will admit, and all is ready for administering the injection. This is done by very gently depressing the siphon trigger, so as to allow the contents to escape very slowly, the gas and water passing from the siphon through the tubes and entering the bowel from the rectal tube. When the patient makes expulsive efforts, stop the inflation at once, and hold the shoulder on the rectal tube firmly against the anus, so as to effectually prevent the escape of the injection.

After the tenesmus has ceased, proceed as before until the intussusception gives way or the limit of safety is reached. The siphons I have been using contain thirty-seven and a half ounces of water charged with carbonic-acid gas at a pressure of 150 pounds to the square inch. The carbonic-acid gas and water have a soothing effect also on the heated and inflamed bowel, and aid in the induction of retro-peristalsis. The first practical test I had with Dr. Forest's device was in 1886, with my then business associate, Dr. E. B. Bayliss, who reported it, and case 2, in the *American Journal of Obstetrics* in the November number of the same year. Cases 5 and 6 are introduced with this as completing the report of cases.

CASE 4. Carrie S., female, aged three years, July 14, 1886. Was called late in the evening to the patient. She had been suffering with diarrhea for ten days, but for the last three had voided nothing except bloody mucus. There was tenesmus and protrusion of the mucous membrane of the rectum on attempts at stool. Abdomen was tympanitic and tender, and the legs were drawn up against it. There was slight vomiting. Paregoric was given until morning, by which time the necessities for constructing the apparatus could be procured.

July 15. Condition much the same. A tumor about three inches in length was located in the transverse colon, and appeared to be an intussusception of ileum into colon. About one fourth of a siphon was used slowly and carefully, causing the tumor to gradually disappear. The child became calm and quiet and rested comfortably. July 16, the child had had two stools since the injection; the first, fecal, with some blood and mucus; the second was entirely fecal, and was saved for inspection. There was no pain nor tenesmus, and the tenderness had almost disappeared from the abdomen. The same afternoon another small injection was given, as the symptoms indicated a slight return of the trouble. There was no further difficulty, and, save a paregoric mixture, no medicine was given. A careful diet was enjoined, and that the child be kept in bed for a few days and pass her stools while lying down.

CASE 5. Lucy K., female, aged eight years,

August 14, 1887. Child had been suddenly attacked with diarrhea on August 11th. When seen, she was in great misery. There was vomiting, and the abdomen was slightly swollen and painful at a point near the ileo-cecal valve, where a small tumor was felt. No stools had been passed for eighteen hours, though many attempts, resulting in the discharge of mucus and blood, had been made. An injection of one third of a siphon was given, which caused the tumor to disappear and allayed the vomiting and colic. A prescription of paregoric and cardamon was occasionally given.

No food except milk was allowed, and she was also ordered to remain in bed and pass the stools while lying down. Found the patient all right in the morning, she having had one large fecal passage without pain or distress. There was no further trouble.

CASE 6. Chris. R., male, aged four years and six months, June 29, 1889. This patient had been under treatment for entero-colitis two weeks previous to the accident, but had been in ordinary health for a week at the time it happened. He was seized with the usual signs of an intussusception, the tumor being located in the descending colon at the sigmoid flexure. Its presence was demonstrated by carrying the finger well into the rectum and making counter pressure on the abdomen. A small injection from the siphon promptly restored the bowel to a normal condition. There was no relapse.

These three cases, with those reported by Drs. Foster and Bayliss, together with the successes of Dr. Senn in this line, encourage the thought that there is no method so successful, nor is there one so safe when the intussusception lies in the colon. If the ileum alone is concerned, laparotomy or opium will probably have to be relied on. The only contraindications to the use of injections of whatever nature are:

1. When the intussusception lies in the ileum.
2. When extensive peritonitis is present.
3. When firm adhesions exist between the opposed surfaces of the gut.
4. When collapse has taken place.
5. (Ziemssen). When in intestinal affections in which there is diminished resisting

power of the intestinal walls. Practically this only refers to such conditions as typhoid fever and intestinal tuberculosis.

It is estimated that from 30 to 40 per cent of children recover by the use of injections, while only about 14 per cent survive the operation of laparotomy. Of this, Atfield says: "If the case be one of intussusception, the surgeon will in my judgment consult the best interests of his patient by declining operative interference, because—

"1. The tender age of many of the subjects of invagination renders them peculiarly ill-adapted to support so grave an operation.

"2. The operation, which is always one of a very serious nature, is particularly so in these cases on account of the frequent existence of peritonitis as a complication.

"3. The attempt to dislodge the invaginated bowel is very apt to fail.

"4. There is very fair probability of spontaneous recovery after sloughing of the invaginated gut."

In view of these expressions it would seem best to reserve the operation for those older than ten years, as each year past that age adds to the chances of the operation being successful. Mr. Barker, of London, England, however, takes a different and more advanced position in the matter than most surgeons, believing that in suitable cases section when done early enough offers a very fair chance of recovery. The Medical News of September 15, 1888, gives an abstract of Mr. Barker's paper as reported by him in the Lancet of August 11, 1888, substantially as follows:

"A child four years old, with positive symptoms of intussusception, came under the care of Mr. Barker. A median incision was made and the hand carried into the abdomen, and the tumor reduced according to Hutchinson's method. This consists in pushing the tumor upward from below, and at the same time retracting the ensheathing bowel with one hand, while with the other gentle traction is made upon that portion of the intestine which enters the upper portion of the invagination. The recovery was complete. Statistics are given of 63 cases of intussusception of all varieties which were treated by abdominal section. Of this number

38 were children, with a mortality of 87 per cent, and 25 were adults, with a death-rate of 68 per cent. In all, 13 recovered and 50 died; mortality 74 per cent. Section was performed in 34 cases, and the bowel released (including Barker's case, with a mortality of 65 per cent. In 29 of these cases the intussusception was irreducible. In 5 of the 29 cases the incisions were exploratory, as there was no attempt at reduction. In 14 the bowel was resected, and in the remaining 10 artificial anastomoses were formed. But a single one of these 29 cases recovered—that of an adult whose intussusception was resected."

In those cases where inflation or abdominal section are contra-indicated or refused, opium must be relied upon to give relief. Here, as in peritonitis, large and oft-repeated doses, but little short of complete narcosis, are of the greatest value. Enough should be given to completely stop all peristalsis and pain, for by so doing the patient is rendered comfortable, and the intestine is left in a condition favorable to the reduction of the intussusception by nature or manipulation, or to a sloughing of the invaginated portion, as has happened in a number of reported instances. Belladonna has been advised, but its use is attended with very little good effect, and mercury is not to be thought of. When the opiate treatment is adopted in anticipation of a cure by sloughing, the latter may be expected to take place somewhere between the seventeenth and twenty-fifth days; 15 per cent (Treves says 42 per cent) of all cases recover by this means.

Lichtenstern's well-known statistics give 557 cases in which the termination was known, and of these sloughing occurred in 149 (26 per cent); 88 of the 149, or 59 per cent, ended in recovery, and 61, or 41 per cent, in death. Of the 408 in which sloughing did not take place, only 63 (about 14 per cent) terminated favorably; 345, or 85 per cent, ended in death.

Dr. Rinteln (*Berliner Klin. Wochenschrift*) reports a case May 24, 1875, where sloughing took place in a woman of sixty years on the twenty-fifth day. She made a complete recovery, and was in good health ten years afterward. In this case about four inches of the small intestine was discharged. Another such interesting result

occurred in the practice of Dr. John Ferguson, of Toronto, Canada, in which an adult male discharged four and one half inches of the jejunum on the seventeenth day and recovered. (Medical News, December 15, 1885). A number of instances of repair by sloughing are also recorded in the text books on surgery, and by Treves in "Intestinal Obstruction."

Some observers are of the opinion that repair by sloughing is not desirable because the adhesion of the surfaces is of a mechanical nature and is apt to give way before permanent healing is complete, or that a stricture may be formed that will seriously impair the normal usefulness of the intestine or even reproduce the intussusception at a later period. These anticipated disasters are almost too remote to have much weight in the treatment; they certainly give the surgeon no uneasiness when he finds it necessary to make a resection of the gut in this or other conditions. Careful attention to diet, habits, and occupation for a considerable time after an intestinal disorder of this nature will amazingly lessen the dangers which might otherwise happen.

For some time following an intussusception, whether the reduction has been accomplished by injection, sloughing, or section, the diet should be most carefully regulated, and only those foods permitted that leave a minimum quantity of bulky refuse to pass through the digestive tract. Neither should the digestion be overtaxed and the risk of diarrhea or constipation incurred. During the presence of the acute symptoms no food should be allowed *per os*, rectal nutrient enemata being much superior in the management of the case. In these, as in other intestinal disorders, it is well to first rid the rectum and lower colon of fecal material by means of an injection of warm water, and after a few minutes to carefully and slowly introduce from four to six ounces of the selected nutrient. I have been in the habit of using the following emulsion, which, if given every four to six hours, appears to support the patient very fairly. It is as follows:

Calf's pancreas.....	} āā 3ii ;
Sweet milk.....	
Brandy.....	
Crystal pepsin.....	
	3i ;
	gr. x.

One patient, in whom rupture of a gangrenous bowel took place after operation for femoral hernia, became heavier and more fleshy while fed on this per rectum than previous to the operation. The emulsion is never rejected unless too large a quantity is given.

A question which the physician and surgeon will have to decide is, when shall operative procedures be taken? Or how far may other measures be permitted? The exigencies of each individual case will have to be determined upon its own merits, and the good judgment of the physician give the decision. Some cases may present no urgent demand for section for a week or more, while in others it may be imperatively demanded as early as the first or second day, or almost immediately after a positive diagnosis is made. Delay in these latter cases means inevitable death, for peritonitis will occur and develop so extensively and rapidly that section would only hasten a fatal result.

Dr. Richardson (*Asclepiad*, May, 1889) says: "So soon as this symptom (fecal vomiting) is established there should be no hesitation in opening the abdomen for the exploration of the obstruction and the attempt at removing it. Obscurity of diagnosis in regard to the seat and nature of the obstruction ought not, in the presence of this special symptom, to prevent the resort to surgical interference, because sometimes what is inferred to be a complicated obstruction turns out to be an extremely simple one; and again, if the obstruction be complicate, it may admit of being relieved without any further serious danger to the patient than would arise from omitting the operation."

It is well to err on the safer side, and attempt to rescue the patient by means of an operation than to passively permit him to die unrelieved. In looking over the history of the accident of the numerous cases reported, and the possibilities of treatment, the following conclusions drawn from the subject are suggested for your consideration:

1. That intussusception in the small intestine is best treated by laparotomy or by opium.
2. That when the intussusception is in the colon it is good practice to make use of liquid or gaseous injections before resorting to the knife.

3. That the earlier abdominal section is made after being decided on, the better are the chances of recovery.

COVINGTON, KY.

PLEURITIC EFFUSIONS.*

BY CHARLES W. AITKIN, M. D.

In asking the attention of this Society to the subject of Pleuritic Effusions, I do so, not from the fact that I expect to advance any new treatment; for Dieulafoy's aspirator, with the many modifications it has received, gives us perfected means of treatment so far as serous effusions are concerned. I hope, however, to call the attention of the profession to the fact that pleurisy with effusion—since it is not accompanied by the marked symptoms found in an acute attack—is oftentimes overlooked, and the patient is treated for various affections unless a careful physical examination is made. I have endeavored to select three cases of effusions into the pleura to represent this class that is not often recognized except by physical examinations. In my short experience in the practice a number of such cases have presented themselves for treatment. All have been relieved except four; three of these would not submit to a thoracentesis; one who did, died after several months of pulmonary tuberculosis. I have only seen one case where there was any effusion of consequence that was absorbed. In the three cases who would not have thoracentesis made, two died in paroxysms of orthopnea, the other passed into a purulent pleurisy, the lung tissue became involved, and the patient died from phthisis. The importance of detecting these cases early can hardly be overestimated.

We let an effusion alone a few weeks or months and it may become purulent: the patient is subject to septic poison, the pus may pass into the lung, and soon the patient dies with symptoms akin to pulmonary tuberculosis. The general symptoms of effusions of the chest are often wanting; the patient may complain of a slight dyspnea, sometimes a hacking cough; frequently they say, "I am simply fatigued," without describing any special symptoms; how-

ever, if we make a careful physical examination we will elicit dullness on percussion, no breathing is detected where the dullness is prominent, and there is absence of vocal resonance. In females the menstrual function is usually arrested. In *very* many cases we will not see the bulging of intercostal spaces, nor may we notice the absence of intercostal movements, especially if the effusion be recent and the quantity small; however, if we have dullness, no breathing, and no vocal resonance, we are justified in using a hypodermic needle, and this will clear up the diagnosis. The use of the hypodermic as an exploring needle in these cases can do no harm if used in careful hands, provided the needles are kept thoroughly disinfected.

Permit me to give brief reports of three cases:

1. Miss A., aged eighteen years, came to my office complaining of a slight cough, without expectoration, amenorrhea, anorexia, constipation, some dyspnea, pulse 96, temperature 99.8°, respiration 24. She being a young lady and I a young physician, a physical examination was embarrassing, so I prescribed a ferruginous tonic, with some palliative for the cough. After a week I was called to see the patient at her home; she said she was "no better, but rather weaker," general symptoms about the same as ten days previous. I percussed the chest, or rather a dress with a full supply of underwear, and then applied a stethoscope to try to listen through this clothing; of course, every physician who has tried these experiments knows what the result was. I knew no more after such percussion and auscultation than I did before. I prescribed a tonic with a laxative and left, "hoping the patient would be well in a few days." The "few days" came around as usual, but the patient was not well, and in two weeks I saw her again. At this visit the patient was in bed and was only dressed with a gown and light under garment. In percussing over the light vest I thought I detected dullness on the right side from fifth intercostal space down; then, after some apologizing without any common sense explanation on my part, I got all the clothing covering the chest out of the way and made my first satisfactory phys-

* Read at the May meeting of the Kentucky State Medical Society, 1890.

ical examination of the case. I gave opinion of effusion, and after considerable persuasion the patient consented for me to use a hypodermic needle, which procedure confirmed my diagnosis. After several days more of lost time trying to aid in the absorption of the fluid, she consented to aspiration, and about one pint of serum was removed. The patient was put on tonics, and in about one month she was enjoying excellent health. She gave no history of an acute pleuritis at the beginning of her illness, and after the fluid was removed there was never any indication of a return of the effusion. Had a physical examination been made earlier the patient might have been saved many days of uneasiness, not to say any thing of the danger to her general health. This case taught me the best lesson on physical diagnosis I have ever learned.

2. In August, 1889, M. T., aged twenty years, called at my office; said he had suffered from neuralgia or rheumatism of the right side for the past month; he complained of a slight dyspnea, no cough, had a fair appetite, claimed to have suffered no severe pain, but said there was constantly an uneasy feeling in the side. Pulse 98, temperature 100°, respiration 26. When his clothing was removed from his chest I found a porous plaster applied to his "neuralgiac or rheumatic side," whereupon he told me that a doctor had applied it in order to relieve the neuralgia. Physical examination revealed that the right chest was the receptacle of a quantity of fluid; the patient at once agreed to a thoracentesis, and in two days afterward I removed by aspiration two and one half pints of serous fluid; the young man was kept quiet for forty-eight hours; he took tonics for about three weeks, and has since been actively engaged at work, there being no recurrence of the effusion.

3. In October, 1887, I saw M. M., aged twenty-four years; he had been treated two weeks prior to my visit for a pneumonia, and was dismissed as well by his family physician. The patient thought he was more poorly when dismissed than when he first called his physician; however, there were no symptoms present indicating any acute sickness; he complained of uneasiness in left chest, an oppressed feeling, had

some coughing on least exertion, but no expectoration, bowels constipated, not much appetite. Physical examination showed that the left chest was too full, intercostal spaces did not respond to respiration, dullness complete on left side, no breathing could be heard over normal space for left lung, the heart was so displaced as to put the apex at the right nipple; an exploratory puncture through the chest walls showed a straw-colored fluid; on aspiration three pints of serum were drawn off; a week afterward one and one half pint were removed; this gave relief for about five weeks, when I was again called to aspirate, and found a sero-purulent fluid, removed three and one half pints and washed out cavity with a bichloride solution; a week afterward three pints more were withdrawn and the cavity was washed out with a solution of iodine; the patient then felt much better for ten days; at that time he complained of pain in left side, and his temperature went up to 103.6°. Thirty-two ounces of an offensive purulent fluid were removed, and the cavity was again washed with a bichloride solution, the patient was advised to have a free opening made into the chest and a drainage-tube inserted, but he hoped for the better without this operation. He improved apparently for a week, when the temperature went rapidly up to 104° and pulse to 140; stimulated him with whisky, and after giving a hypodermic injection of morphia I again aspirated, this time drawing off eighty-two ounces of very offensive pus. He now agreed for the chest to be opened, whereupon Dr. Ransohoff made the opening, washed the cavity thoroughly, and put in a large drainage-tube; from that time the patient improved gradually, gaining thirty pounds in three months, at which time the lung was still expanding, the heart had assumed its natural position, and the patient was in a fair way to make a complete recovery.

These cases present briefly various phases of these effusions and show the necessity of careful physical examination; one further shows the hopelessness of aspiration when empyema is established. After making the operation over twenty-five times I have never had any trouble except with the case that became purulent. We should aspirate early and remove

the fluid so long as there is any to remove, without causing distress to the patient.

This paper will have accomplished its purpose if it will only cause general practitioners, of the country districts especially, to be more careful in their examinations and detect effusions early.

In the three cases reported, three practitioners failed to detect the true source of trouble; in the first the attending physician finally diagnosed the case and relieved it, but the patient should have been relieved earlier, and a careful physical examination would have revealed the affection at first. In the second and third cases the patients were treated for affections they did not have, and passed out of the hands of their family physician before the trouble was correctly diagnosed and relieved. I believe the failure to diagnose correctly was from a failure to examine carefully.

If a pleuritic effusion exists a careful physical examination will reveal it, yet if there is still a doubt a hypodermic exploration will clear all doubts away and either establish a diagnosis of effusion or exclude such diagnosis. The importance of discovering the effusion early and removing it at once, is apparent. Loomis says, "every day that the lung remains compressed, and with every addition of the plastic deposits upon the pleural surface, the chances of its absorption are diminished, and the danger that the lung will be permanently crippled is increased."

"Dr. Kiely very truly says, "that early aspiration tends to prevent the formation of adhesion bands; it also allows the lung to expand and regain its normal function, and will prevent the contraction of the chest that always takes place after an effusion is allowed to remain for some time; and lastly, it obviates the liability of the fluid's becoming purulent." Our later works, both on practice and surgery, so clearly describe the procedure of puncturing the chest that it is useless to say any thing regarding the operation to this intelligent body of physicians.

If every practitioner who has a case of pleuritic effusion will detect it early and remove the fluid at once, he will save the health and possibly the life of that patient. Statistics show (Pepper's System, Vol. III, p. 529) that

the greatest success in the operation has been obtained in those cases where the fluid has been present but a short time. Delay in the operation increases gravity in the result.

SHERBURNE, KY.

PYOSALPYNX; INTESTINAL LACERATION; OMENTAL GRAFTS.*

BY J. G. CARPENTER, M. D.

The body of this paper is limited to the report of two cases of gonorrheal pus tubes attended with purulent peritonitis, their treatment and recovery; the treatment of lacerations of the intestines in the separation of adhesions and omental grafts.

Negress, aged twenty-five years, has gonorrheal pus tubes and purulent peritonitis—pulse 120; temperature 103°—consents to an abdominal section; the tubes and ovaries are diseased and adherent. In tearing through the adhesions the left tube was ruptured, and pus escaped freely into the peritoneal cavity; the peritoneal and muscular coats of the sigmoid flexure were lacerated on account of the adhesions to the sigmoid. The rent was one of three inches. The peritoneal cavity was irrigated with hot distilled water through the irrigator, the tubes and ovaries removed, and the wounded bowel secured and sewed by several intestinal sutures of fine silk. The abdominal wound was closed with four peritoneal and two superficial silk sutures; the drainage-tube having been inserted, suction of tube was done every minute until the toilet was complete, then every half hour for four hours, then every four hours. When the drainage-tube was found empty it was removed and a rubber one substituted, which was dispensed with in thirty-six hours. The abdominal wound was one inch and a half in length. The wound, tube, and dressing were made aseptic. Patient recovered in fourteen days.

Negress, aged twenty years, has been an invalid more than a year. Has pain in back and hips, right and left iliac regions continuously, greatly aggravated at times. Urination and defecation painful. Digital and con-

*Read at the May meeting of the Kentucky State Medical Society, 1890.

joined manipulation verify the presence of large, tender masses on each side of the uterus, the right much larger than the left. Menstruation is painful. Temperature 102.5° F.; pulse 130. Diagnosis, purulent peritonitis, origin of pus tubes gonorrheal. Before operation, pulse 160. Abdominal section performed. The pus-tube abscess of right broad ligament and ovary roofed by the colon and membranous adhesions; in tearing through the adhesions to evacuate pus and remove the diseased appendages, the peritoneal and muscular coats of the colon were lacerated, so intimate were the adhesions between the latter and the right tube. The peritoneum was deluged with a quart or more of the most offensive pus; the odor of sulphureted hydrogen was very strong. The right tube was adherent and softened, the ovary macerated and disintegrated; the left tube and ovary, being diseased, were also removed. Three irrigations of hot distilled water—about five gallons—were necessary to thoroughly cleanse the peritoneal cavity. The lacerated coats of intestine, being thoroughly cleansed, were placed in apposition by sutures, and a patch or graft of omentum $2\frac{1}{2} \times 4$ inches was placed over the laceration, extending to sound tissue, and stitched by six interrupted fine silk sutures. The graft should extend half an inch or more beyond the laceration. Adhesions between graft and bowel form in about six to twelve hours. The abdominal wound was closed by four peritoneal and two superficial silk sutures, and a large and small drainage-tube introduced, the larger into the abscess cavity of right side. Suction of the tubes was begun at once and continued every minute or two until the peritoneal toilet was complete, then every two or four hours *pro re nata*. Two sheets of rubber-dam with a small hole in the center of each were set tightly over the tubes, each rubber having its own tube. The drainage-tubes were dusted with iodoform, closed with aseptic gauze, and the latter placed around and over the mouth of the tube, and the four corners of the rubber-dam pinned nicely over the gauze. The wound was also dusted with iodoform, dressed with aseptic gauze, and the spica bandage applied. The bowel sloughed under the graft

and a fecal fistula formed in the bowel, and fecal matter passed through the bowel into the abscess cavity and was removed by drainage.

This patient was in a critical condition before the operation, and for ten days after. The small drainage-tube was removed five days and the large one ten days after the operation. Patient completely recovered in three weeks.

The successful issue in these cases is due, no doubt, to the free purgation and soap and hot water bath before operation, and the thorough evacuation and drainage of pus cavity and abdomen, removal of the offending masses, the most complete irrigation with hot distilled water, subsequent asepsis, and rest, the assiduous watchfulness and attention of nurse and specialists, the conspicuous absence of meddlesome nurses and young *internes*, the withholding of chemical antiseptics from the abdomen, and the avoidance of dirty antisepsis and asepsis seen so often in the general hospitals, and the total prohibition of opiates. The best results in abdominal surgery are obtained in private hospitals and in rooms rendered thoroughly clean and aseptic before the operation, and by specialists in abdominal surgery. The best medium of success is in simple asepsis.

Dr. Joseph Price, of Philadelphia, contributed a most valuable paper to the Southern Gynecological Association, entitled Pus in the Pelvis, and How to Deal with It, replete with surgical aphorisms, and which is quite pertinent to my subject. By pus in the pelvis he meant pus that has its *fons et origo* in the pelvic organs or their investment. The rarer causes of pus in the pelvis may be said to be: (1) Carious bone, as psoas abscess. (2) Traumatism, sloughing, results of electricity, direct violence, etc. (3) Foreign bodies, as extra-uterine bone, etc. The general rule is that pus in the pelvis is always the result of diseased conditions of the uterine appendages, whether it occurs as a result of a ruptured extra-uterine pregnancy, a suppurating ovarian or dermoid cyst, or salpingitis caused by gonorrhea, parturition, dirty instruments, electricity, or what not. In general, then, when the surgeon finds pus in the pelvis he will find its origin in the uterine appendages. He has seen pus discharging from the rectum, from the bladder, the umbilicus,

and from the vagina. He has seen psoas abscess, perforating appendicitis, idiopathic peritonitis, and perityphlitis, and found the seat of trouble in the tubes and ovaries. In all his experience he has never seen pus in the pelvis independent of disease of the appendages. To make the statement definite, he has seen, more than once, double pyosalpinx and double ovarian abscess contained within a fifth. Again, he has seen a single pus tube with four distinct pockets in it. Pus can burrow through the cellular tissue and find vent as before stated. How shall pus in the pelvis be treated? The general principles of surgery for the treatment of pus in any part of the body apply with equal force to the pelvis, namely, where pus is present, evacuate it, and secondly, remove the cause of the suppurative process. It is equally as unsurgical and unscientific to allow it to remain in the pelvis as it would be to allow it to remain in the brain, in the mammary gland, or under the fasciæ in any part of the body. It is equally unsurgical to allow a suppurating tube or ovary to remain in the pelvis as it would be to allow a sequestrum of dead bone, or to allow a necrotic placenta or membranes to remain in the uterus. These principles do not admit of evasion. All sorts and kinds of treatment have been tried without avail. Every man of experience knows the futility of counter-irritation, local depletion, or a general systematic treatment in the majority of cases. There are only three methods of treatment common to physicians to-day, namely, electricity, vaginal drainage, and abdominal section, with the removal of the diseased parts through irrigation of the peritoneal cavity and drainage. The first of these methods needs scarcely be mentioned in cases where pus is already present. Electricity has no place in the treatment of pus in the pelvis. Vaginal drainage is a crude, inefficient method, and is not as safe as some would have us believe. In abdominal section we have the quickest, easiest, most exact, and therefore safest mode of treatment for pus in the pelvis. A small incision, rapid enucleation of the offending tubes and ovaries, the breaking up and evacuating of the separate pus-pockets, the separation of adhesions, the thorough

washing out of the peritoneal cavity by copious irrigations of warm distilled water, the placing of a glass drainage-tube in the most depending portion of the peritoneal cavity, and the careful closure of the abdominal incision, give the patient the quickest relief, permanent cure, and very often snatch her from an impending death. Moreover, here we attain the most ideal treatment, for at no other point of the body can we enucleate completely an abscess with its containing walls and pyogenic membrane. However, we should always bear in mind that the province of the surgeon is, first, to save life, then to relieve suffering, rather than to perform ideal operations. Many patients dying with pus in the pelvis need but a feather's weight to depress the beam. In such cases the indications are to evacuate the pus, wash out the cavity, and wait until a future time to remove the offending cause.

In old cases of peritonitis and salpingitis, the cause of an intestinal obstruction is frequently due to intestinal adhesions and the formation of ligamentous bands. In the separation of old adhesions the greatest care is needed not to tear the intestines in the separation of the cicatricial mass. The dissection should be done at the expense of the parietal rather than the visceral layer of peritoneum. To repair the wound tissue, the surgeon has either suturing the peritoneum, covering the wound with omentum, or both, and also an omental graft, and these measures prevent the frequent formation of adhesions. The parietal peritoneum being so loosely attached that it will yield to a space of two inches in width by suturing, when this can be done it should never be neglected, as surfaces denuded of peritoneum are liable to become permanently adherent to adjacent abdominal viscera.

When the omentum is within reach it should be utilized in covering the defect. Numerous experiments on animals have demonstrated that when a piece of peritoneum three or four inches square is removed, and not restored in some of the above ways, permanent adhesions form between the denuded tissues and the adjacent organ.

It has also been proven experimentally and therapeutically that when such peritoneal de-

fects can not be remedied by suturing or covering with omentum, they can be successfully treated by transplantation or peritoneal graft. Senn has removed from each side of the abdominal parietes, at corresponding points, pieces of peritoneum four inches square, and transplanted them to opposite points and sutured them to the margins of the wound with catgut. All these experiments proved successful. Omental grafts answered the same purpose, and only in one instance did the graft fail to unite thoroughly, and here one of its margins projected into the median abdominal incision, which did not unite by primary union. Infection of this margin led to gangrene of the graft and septic peritonitis.

In almost all *post-mortem* examinations of specimens from operations on the intestines observed by Prof. Senn, he found the omentum was adherent over a greater or less surface at the seat of suturing; he also found that perforations never occurred where this additional protection to the peritoneal cavity had formed. To anticipate nature in protecting the peritoneal cavity in this manner, he commenced to transplant an omental flap about an inch in width and sufficiently long to reach around the bowel, where it was fastened on the mesenteric side by two catgut sutures. The flap was either taken from the margin of the omentum or from its middle, care being taken to take some portions supplied with a vessel of considerable size. Its base was left attached to the omentum; all bleeding points were carefully tied with catgut ligatures. The two catgut stitches used for its fixation were passed twice through the flap, its base and free end, and the mesentery, in such a way that when tied the direction of the suture corresponded to the course of the mesenteric vessel, so that, after tying, the vascular supply of the bowel would not be interfered with. When the flap was taken from the middle of the omentum, the lateral halves were united with one or two catgut sutures before closing the abdominal wound.

The advantages that are derived from covering a sutured intestinal wound by an omental flap are self-evident. The procedure is simply an imitation of nature's process in protecting

the peritoneal cavity against perforation, and in hastening the healing of the visceral wound. An adherent omentum secures rest for the part to which it has become attached. As the omental flap becomes firmly adherent before definitive healing of the visceral wound has taken place, it furnishes additional protection, and in the event of a small perforation it guards against perforative peritonitis by mechanically preventing the entrance of pus into the peritoneal cavity. Should pus reach the omental flap after it has become firmly adherent, it is not very probable that perforation would take place through the two layers of peritoneum furnished by the adherent omental flap, and the subsequent healing of the perforation of the bowel would be most likely to take place. Senn makes a distinction between adhesions of approximated serous surfaces and definitive healing of approximated serous surfaces.

Adhesions precede the process of definitive healing, but imply simply the presence of an adhesive cement-substance between the serous surfaces, which mechanically agglutinates the parts, while definitive healing includes all the processes which take place during cicatrization.

In intestinal surgery this distinction has an important practical bearing, as perforation may take place as long as the serous surfaces are simply held together by adhesions, while such an occurrence is beyond the reach of all possibilities after the approximated surfaces have become united by living organized tissue. Adhesions between serous surfaces take place by the exudation of plastic lymph, which acts the part of a cement material, while, on the other hand, the process of definitive healing is initiated by cell-proliferation from the pre-existing endothelial and connective tissue cells, and the formation of a net-work of new blood-vessels during cicatrization after ligature. In suturing an intestinal wound, or in making a circular enterorrhaphy, it has always heretofore been deemed necessary not to injure the peritoneum unnecessarily, for fear that such injuries would result deleteriously by interfering with the prompt union between the sutured surfaces.

Senn, by experiment, resorted to traumatic

and chemical imitation of approximated serous surfaces, and found that the former was far preferable to the latter. It is a fact that approximated normal serous surfaces do not result in the formation of adhesions. To secure this union, mechanical irritation of the approximated serous surfaces causes a circumscribed plastic peritonitis which always results in adhesion and obliteration of the serous surface. No diffuse peritonitis was present in *post-mortem* in any of the cases. The adhesions formed were firmest and definitive healing greatest, first, where scarification was performed. Traumatic irritation by scarification of the peritoneal surface with the point of an aseptic needle is the most potent means to provoke a circumscribed plastic peritonitis, and is followed within a few hours by a copious exudation of plastic lymph, which, like a cement-substance, mechanically agglutinates coaptated serous surfaces. The same measure, by destroying the continuity of the non-vascular layer of peritoneum, brings at once in contact the vascular net-work of both sides of the peritoneum, and opens up a direct route for the new vessels—an important element in the rapid healing of the visceral wound. After a few days the omental flaps were found firmly adherent and vascular around the whole circumference of the bowel, constituting a ring of living tissue outside the line of suturing. A great objection to the transplanted omental flap is this, it might be a cause of intestinal obstruction by making traction on the bowel, causing a flexion, or become a band of constriction for some loop of intestine.

Chemical irritants, by destroying the endothelial layer of the peritoneum, retard rather than favor early adhesions and union of approximated serous surfaces.

Senn substituted omental grafts for transplanted omental flaps, and found them equally successful; they were from one and a half to two inches in width, and of sufficient length to completely encircle the bowel. The free ends were made to project a few lines beyond the mesenteric attachment, and were fixed by two fine catgut sutures, each of which embraced the corresponding angles of the graft and the mesentery. The stitches were made in the di-

rection of the mesenteric vessels, so that, in tying, no vessel should be included in the suture. The grafts retained their vitality, and became firmly adherent in a few hours. Scarification of the graft hastens the processes of adhesion, granulation, and vascularization. Senn advises the omental grafts, as soon as cut, to be placed in 1-2,000 bichloride solution at the temperature of the body, to insure an aseptic condition before transferring it to its new location, and also drying it between gauze or sponges by pressure wrung out of the same solution. Dr. Joseph Price, of Philadelphia, renders the peritoneal cavity and contents aseptic by irrigation with hot distilled water, then cuts away the graft, scarifies it, and unites the free ends by sutures. The scarification should cause only slight oozing, as much hemorrhage would prevent adhesion and union of the apposed serous surfaces. Omental grafts are indicated in repairing peritoneal defects of visceral injuries of abdominal organs, in covering large stumps after ovariectomy or hysterectomy where the pedicle is treated by the intra-abdominal method, as well as after suturing large wounds of stomach, intestines, and after circular enterorrhaphy.

Senn has formulated the following aphorisms:

1. Definitive healing of the intestinal wound is only initiated after the formation of a network of new vessels in the product of tissue proliferation from the approximated serous surfaces.
2. Under favorable circumstances quite firm adhesions are formed within the peritoneal surfaces in six to twelve hours, which effectively resist the pressure from within outward.
3. Scarification of the peritoneum at the seat of coaptation hastens the formation of adhesion and the definitive healing of the intestinal wound.
4. Omental grafts, from one to two inches in width, and sufficiently long to completely encircle the bowel, retain their vitality, become firmly adherent in from twelve to eighteen hours, and are freely supplied with blood-vessels in from eighteen to forty-eight hours.
5. Omental transplantation or omental grafting should be done in every circular resection or suturing of large wounds of the stomach

or intestines, as this procedure favors healing of the visceral wound, and affords an additional protection against perforation.

In concluding, the writer is under many obligations to Drs. Joseph Price and Charles B. Penrose, jr., for the interesting cases reported, and to Dr. Senn for remarks on omental grafts.

STANFORD, KY.

Societies.

KENTUCKY STATE MEDICAL SOCIETY.

Annual Meeting, Held at Henderson, May 14, 15, and 16, 1890.

[STENOGRAPHICALLY REPORTED BY H. ALLEN KELCH, M. D.]

[Continued from page 357.]

THURSDAY, MAY 15TH, AFTERNOON'S PROCEEDINGS.

At the assembling of the session the secretary, Dr. Steele Bailey, of Stanford, read a telegram containing an invitation to the Society to attend the ceremonies of the laying of the corner stone of the Beaumont Medical College at St. Louis.

Under the head of Miscellaneous Business, the following communication from the Kentucky Pharmaceutical Association was received and referred to the proper committee with instructions to act:

"The undersigned, representing the Kentucky Pharmaceutical Association, beg leave to call your attention to some matters of mutual interest.

"The practice of medicine and pharmacy are so intimately connected, and depend so much one upon the other, that neither can afford to do any thing or permit any thing to be left undone that has a tendency to advance the other in all that pertains to the proper fulfillment of the obligations resting upon them.

"Until within the last three decades, legislation that was calculated to encourage and elevate pharmacy was confined to a very few States. Within that time, however, the number has been increased until now nearly forty States and Territories have laws regulating the practice of pharmacy on their statute books.

"In 1874 the State of Kentucky enacted a pharmacy law, the provisions of which were restricted to places of five thousand or more inhabitants. The protection thus afforded the citizens of the larger towns and cities was denied those who resided without their limits. In 1888 a new law was enacted. The Committee on Public Health in the House of Representatives,

to which it was referred, demanded that its provisions should be restricted to places of one thousand or more inhabitants. We are sorry to say that this restriction came from the medical fraternity, as this committee was composed wholly of physicians.

"Through the influence of these enactments the young men who have proposed to make pharmacy their business have been stimulated to greater efforts and greater desire for a thorough knowledge of their chosen profession. The Colleges of Pharmacy, being more largely attended, have been enabled to employ the best talent in the country, and have constantly increased their proficiency and have from year to year elevated the standard. A graduate from most of the colleges is required to take two courses of lectures and to have three years' practical experience. The influence of these enactments has not confined itself to the districts to which they were restricted, but young men all over the State have sought and obtained diplomas from the Colleges of Pharmacy.

"Referring to the minutes of the Kentucky Pharmaceutical Association for the meeting held at Crab Orchard last May, we find that the delegate of the State Medical Society asked that efforts be made to have the provision of the pharmacy law extended to the whole State. The president of the Pharmaceutical Association in his address made the same recommendation. The legislative committee did not believe an amendment extending over the whole State could be passed, and wisely concluded to ask only for an extension to all incorporated towns. This was easily passed through the Senate, but the Committee on Public Health of the House refused to recommend its passage, and again the measure was 'slaughtered in the house of its friends.' There seems to have been more politics than protection to public health in the minds of the committee. We believe a resolution passed by the State Medical Society requesting the passage of the amendment would be of great value and largely increase the possibility of securing the passage.

"Other legislation, that would be of great value to these professions, should be asked for.

"The law as it stands now gives to the undertaker a preferred claim on the estate of a decedent for carriages, plumes, gloves, crape, and other unnecessary paraphernalia, while the physician and pharmacist who attended him and furnished medicines in his last illness have to be contented with a *pro rata* distribution of what the undertaker leaves. Against the bill of the grocer and the tailor, the butcher and the rag dealer there is no exemption, but the physician and the pharmacist have to face the exemption laws and make the best of it.

"The doctors and druggists are not the only ones who suffer from this unjust legislation. The poor man who is sick and unable to work needs credit. Without money and without credit the proper medical attention may not be given. We opine that, could he then make choice as to which should have the preference, he would decide in favor of proper medical treatment and against an extravagant funeral.

"If we are to be guided merely by sentiments and disregard all business principles, if we propose to exalt our calling to a sphere above all worldly matters, then we should pay no attention to such gross things as the collection of accounts.

"Of course there can be no legislation on these subjects until the sitting of the legislature of 1891-92, but it is well to begin now and be thoroughly prepared then.

"The differences, if there be any, between physicians and pharmacists are small, and possibly exist only in the minds of some who have magnified small differences or imagined great ones. Whatever of this is real may be very readily removed by freer intercourse and a perfect understanding. Certainly antagonism should not exist, and grievances that occur should be speedily adjusted.

"Pharmacists are suffering from the frequent prescribing of the product of manufacturing pharmacists, the prescriptions designating the name of the manufacturer, thus requiring the carrying of several lines of goods in stock, identical in composition, and thereby entailing loss of use of capital, storage room, and time, all of which otherwise might be profitably used. In the larger cities this inconvenience and loss are not so much felt, as wants may be supplied from wholesale houses as desired. Many of these preparations can be profitably made by competent pharmacists and furnished at a less price, thus bringing into play the ability of the pharmacist, furnishing him better profits and less outlay, and saving to the consumer money that either goes into the pocket of the manufacturer or is expended by him in advertising.

"It is true that many of these preparations can not be profitably made in small quantities, that in such instances the manufacturer must be relied on. In this case the pharmacist should provide articles of general formulae from reliable sources, and, doing this, it should not be necessary that he should carry more than one line. For a proper selection and dispensing of such articles he should be held responsible, and his reliability here should be recognized, and he should not be required to furnish any special manufacture.

"The proprietary preparations that have been so greatly multiplied in recent years are

fast filling the shelves of the pharmacies. Many of them are valuable, but we believe that with proper encouragement the competent pharmacist could and would duplicate many of them, which would be greatly to the interest of consumers as well as to themselves.

"In conclusion, we bring the greetings of the Kentucky Pharmaceutical Association, and wish you a harmonious and profitable meeting."

Dr. J. M. Mathews, of Louisville, read a resume of the advances in rectal surgery. He said: "Along with the rapid revolution in surgery in the last half decade, those interested in the special surgery of the rectum have kept pace; although it was thought at first that antiseptics would avail but little in the treatment of these diseases, experience has taught differently. In the laying open of fistulous tracks, opening of abscesses around the rectum, in operations for hemorrhoids, removing cancer, and especially in doing inguinal colotomy, anti-septic surgery has proved to be a boon."

He regarded Whitehead's operation for hemorrhoids, by removal of not only the hemorrhoids, but the entire hemorrhoidal plexus as well, one to be regarded as undesirable, for the reasons that it meets the demand in but few cases; it involves the dangers attendant upon surgical anesthesia; it involves a full and complete paralysis of the sphincter muscles in order to do the operation; it necessitates the division of large blood-vessels in a situation difficult to ligate; it demands union by first intention, or a large suppurating wound follows; it necessitates an unnecessary amount of surgery; and finally, secondary hemorrhage is more liable to occur on account of its extent.

The plan of laying open fistulous tracks and bringing the edges together with a view to healing by first intention when practiced under antiseptic precautions has proven eminently successful. The elastic ligature can but fail to cure many cases, and consequently can not become universally popular. Reports from a number who have used an instrument of the author's device confirm the idea that it is a simple method of cure, especially in recent cases having but one sinus. When either of these methods is contrasted with the knife in the general treatment of fistula, they can not suffer by the comparison. Believing that there is some lesion in all cases denominated neuralgia, the author has recently found many cases relieved by injections of cold instead of the hot water almost universally employed in such cases.

In those intractable cases known as pruritus ani the author has found campho-phenique in its pure state, or mixed with an equal quantity of the benz oxide of zinc ointment, of great

benefit, the itching frequently di-appearing as if by magic. He considered also the subjects of cancer and colotomy.

DISCUSSION.

Dr. Rodman, of Louisville, said: "I was pleased, from the beginning to the end of this able paper, particularly with the remarks in reference to Whitehead's operation. In a report on surgery which I made a year ago I took exactly the position of the author. I did not then think the operation would improve. I did not think it would or will do much good unless there is prolapse of the rectum at the same time. It is an old operation; it was done long ago. Dupuytren lost a case by it. As to the harmful effect of antiseptics, there is no place in the body where a standard solution could do any harm except in the peritoneal cavity. It is particularly important that antiseptics be used in the rectum. Inguinal colotomy is coming into favor, but there are able arguments in favor of the lumbar operation, not the least of which is the position the opening occupies in front in the inguinal form, allowing a constant odor of feces to offend the victim's nose; and while the advocates of the inguinal operation claim that it can be better cleaned than the lumbar, it can not be kept in a state that is pleasant to the nostrils."

Dr. McChord, of Lebanon, said: "I was gratified to hear Dr. Mathews express himself as he did in reference to the antiseptic methods. To say they are done away with is absurd. The general practitioner can not afford to ignore the advantages they give him. We, in the country especially, are called upon in emergencies where we have no hospital appliances, and we have to improvise them, and do the best we can, and we are bound to take the advantages which antiseptics give us, although they may not afford us perfect protection."

Dr. J. M. Mathews extended an invitation to the Society to attend the Mississippi Valley Medical Association, which meets in Louisville on the 8th of October next.

Dr. J. A. Ouchterlony said: "When Dr. Mathews mentioned the meeting of the Mississippi Valley Medical Association, I felt a pang of regret, as I expect to sail for Europe the first of July, to be gone for several months. I am happy to know that I shall be able to return in time for the meeting, and nothing but death or serious sickness shall prevent my attendance. Every one here should do his best to be there, and take part in the discussion of the grand and original papers, and meet many of the best men in the medical profession. I hope as large an attendance as possi-

ble from the State Society will grace the occasion with their presence."

Dr. Dudley S. Reynolds said: "The Mississippi Valley Medical Association was begun as the Tri States Medical Society. The growth of the body and the superiority of the work became so manifest that it was deemed best to extend the field and increase the territory. In 1883 the name was changed at Indianapolis, with the understanding that the society should draw its membership from all the States in the Mississippi Valley. Since then the meetings of the society have been characterized by great harmony and great intellectual and scientific activity. Now the transactions almost equal in bulk, while they fully equal in interest those of the National Association."

Dr. Dudley S. Reynolds read as follows on the subject of Ophthalmology: "I have not had time, Mr. President, to glean the literature of the subject of Ophthalmology for the past year, and I have, therefore, contented myself with formulating a series of items of interest to the general practitioner as well as to the specialist. I invite your attention to three subjects only, and desire to present what appears to me the most important features of them: First, those forms of local keratitis attended with ulceration; the treatment of opacities of the cornea and the intrestitial opacities resulting from constitutional disease; second, the treatment of chronic lachrymal diseases; and third, the technique of cataract extraction as recently modified.

"The local forms of keratitis ulcers are limited to three varieties: (a) The traumatic, including burns, and the loss of substance by mechanical agencies. These are important in proportion to the dangers of infection, the adhesion of contiguous parts of conjunctiva, and the formation of masses of cicatricial tissue. (b) Those ulcers which, from the nature of the infecting material or the extent and character of the mechanical injury, lead eventually to perforation. (c) The opacities of the cornea following infection of abraded or wounded surfaces. Those due to wide breaches of continuity and the intefstitial opacities due to constitutional causes are included together for therapeutical reasons.

"The extraction of cataract through the dilated pupil should be considered with reference to the location of the section of the walls of the globe, the manner of incising the capsule of the lens, and the introduction of the iris retractor; through a coloboma iridis, whether by a previous iridectomy, or the iridectomy done at the time of extraction; the influence of the fixation forceps, and the services of an assistant upon the results of the operation;

the after-treatment, whether by plaster with or without cotton-wool padding of the closed lids, or by the bandage.

"Where foreign bodies have lodged in the eye, and have been removed before the ophthalmic surgeon is called, the eye is irritable and weeping, and much importance attaches to the recognition of any abrasion of corneal epithelium. For this purpose Straub's fluid, made by dissolving ten grains of powdered fluorescin and fifteen grains of bicarbonate of sodium in one ounce of distilled water, should be used by instilling one drop upon the corneal surface. The fluid is red, but any abrasion of corneal or conjunctival epithelium will in a moment appear as a green colored spot. This coloration will remain for two or three hours, thus enabling the surgeon to thoroughly sterilize the abrasion by local application of the actual cautery, or by carefully touching the whole base of abrasion with pure phenol or campho-phenique.

"In burns and other injuries involving loss of corneal substance, the utmost importance attaches to prompt and permanent separation of the lids, and the almost continuous application of some mild, yet efficient antiseptic. The ointment of either boric acid or yellow oxide of mercury must be used in all cases of wide breaches of continuity. For the smaller ones antiseptic lotions of boric acid, borate of sodium, corrosive sublimate, chloride of sodium, chloride of ammonium, or phenol.

The Panas fluid, which Dr. David Webster has lauded so highly in ophthalmic operations, especially in the extraction of cataract, is of little or no value, since the solution does not contain any mercury whatever. The formula of Panas is, Biniodide of mercury, 20 parts; alcohol, 400 parts; distilled water, 20,000 parts.

"Analysis of this fluid shows no trace of mercury. Allowing it to set aside, after a few minutes you may observe a fine red, cloudy precipitate at the bottom.

"Practically then the Panas' fluid has no virtue whatever, unless it be the slightly stimulating effect of alcohol.

"If corrosive sublimate solutions produce opacities, what shall be done? We have to look back and get a lesson from one of the old masters in medicine who more than twenty-five years ago called attention to the irritating effects of the metallic salts, Henry W. Williams.

"His statistical tables were discarded by the foreigners who had long acquired the habit of application of nitrate of silver. Notwithstanding the dangers which have long since been pointed out of using the acetate of lead

in solution, yet these preparations are still occupying conspicuous places in the most recent treatises on diseases of the eye. We have to stop and consider, in reading medical books, that they are written by men liable, in their desire to cover the whole field, to copy from unreliable sources, and proves the truth of the statement of the late Lunsford P. Yandell that "writing a treatise on any branch of medicine should imply a personal experience."

"Now, to go back: Those local ulcerations of the cornea which are due to traumatic injuries and abrasions involving wide breaches of continuity must, of necessity, be repaired by cicatricial tissue. This, of course, is always opaque, and the thing to be considered then is what shall be done with the opaque cornea. There are several methods of treatment. If it invade not only the anterior elastic layer, but the middle, continuous with the sclerotic, then the opacity can not under any circumstances be removed. If you drill it out after the manner of Von Hippel, who included all those parts anterior to the posterior elastic layer, you can not succeed.

"Prof. Chi-solm reported a successful case, but after six months the opacity was quite as deep as ever. However brilliant it may have appeared at first, it spread to contiguous parts.

"Dr. Fox, of Philadelphia, reported two cases that speedily got into the newspapers, as brilliant achievements, but Dr. Fox is now the unfortunate defendant in a suit for malpractice in one of those cases. The brilliant result was but a delusion, a temporary result, only succeeded by a dimness of vision greater than existed before. At the meeting of the Mississippi Valley Medical Association at Indianapolis, September, 1883, I reported thirty-six cases treated by acupuncture. In all of these cases the opacity invaded the anterior elastic layer, and acupuncture was practiced with the needle with the result of diminishing the density of the opacity. In the first case I had set out to stain the opacity by driving in a quantity of India ink. Inflammation set in, a gray lymph film formed on the surface, the patient suffered greatly from pain, and in a week's time no trace of the pigment could be found, but the cornea seemed clearer than before. Observing the result, I felt encouraged to practice acupuncture, simply abandoning the idea of tattooing. The opacity was gradually diminished until finally the patient could see to count fingers at eight feet. The other cases reported were all more or less benefited, complete clearing up occurring in those cases where the anterior elastic layer alone was involved. In the interstitial opacities, whether due to traumatic injuries, burns, or constitutional dis-

eases, Séchel's method of the local application of the tincture of cantharides was resorted to by separating the lids, and with a well dried piece of soft old clean muslin touching the cornea, removing all tears and secretions; then, when it is lifted, laying the tincture of cantharides on carefully with the brush, holding the eye open for a moment. The smarting sensation is in some cases very slight, in others quite acute, but not in any case for a very long time.

"The question, however, of treatment of those ulcerations of the cornea which are about to perforate, is full of vital interest. It was formerly the custom to puncture in order to relieve the pressure; that procedure, however, has been found to be full of danger. If the ulcer is infected, you carry the infecting material into the eye to affect the deeper structures. It is the almost universal experience that eyes treated in that way have to be enucleated, or are permanently impaired. In these cases the application of the actual cautery is not attended by those horrors that usually attach to burning the human body, and a drop or two of cocaine solution almost entirely prevents the pain. The fixation forceps for the eyeball under these circumstances is altogether useless and dangerous. I have long since ceased to use them in operations on the ball.

"If perforation have already taken place, you are almost obliged to pursue an expectant plan of treatment beyond slightly stimulating applications, and, if iritis sets up, enucleation must be done.

"The treatment of chronic lachrymal diseases can very briefly be stated: In all cases of lachrymal disease attended by obstruction of the lachrymal passages, implication of the lining membrane of the nose will be found to coexist, the inflammation almost invariably proceeding upward from the nose.

"The passage of the probe may be called for, but it should not be repeated every day nor every two days nor every week, and it is under no circumstances to be forced; if the instrument stops, nothing is lost by waiting to try again; if it is painful, use a solution of cocaine. After succeeding in passing the probe, syringe the passage with a solution of borate of sodium, and let the patient go with that, so far as the lachrymal passages themselves are concerned, being careful to wash out all retained secretions from the nose.

"The technique of recently modified cataract extraction relates, at first, to the manner of making the section. The point of the knife should enter at the sclero corneal junction, and pass in a horizontal line to the edge of the pupil, then dip into the capsule of the lens,

piercing it, care being taken to avoid a deep penetration into the lens; the point of the knife now being turned forward for making the counter-puncture in the corneo-scleral junction, passing slowly to the completion of the section just within the scleral wall above, provided you intend to extract through the pupil without iridectomy. Make your section upward unless there exists some mechanical reason why it should be otherwise.

"In this modified operation the capsule of the lens is not always punctured as I have suggested, but the cystotome is employed, cutting from above downward. This is the method of Carter, while Dr. Noyes practices horizontal section first, then cutting vertically upward, the section representing an inverted T.

"If you seize the ball with the fixation forceps, you produce a lacerated wound which becomes a fresh focus for infection.

"As the conjunctival membrane is a great sack, by virtue of its folding, you readily understand how the safety of the eye may be endangered by the injury of the fixation forceps.

"The question of combined iridectomy is one of the greatest importance to those who have occasion to operate but seldom. The iridectomy should be done first, and the wound allowed to heal, when the subsequent operation may be done for extraction with much less danger of escape of vitreous."

Dr. J. O. Jenkins, of Newport, read a paper on Acute Intussusception of the Intestines. (See page 363.)

DISCUSSION.

Dr. Owen, of Evansville, said: "There has been great difficulty in former years in diagnosing obstructions in the form of invagination, but since the method of injection by hydrogen gas, as illustrated by Senn, that difficulty has been to a large extent overcome. If the gas is used early, even the obstruction will give way before it, and in cases where it exists it affords a positive diagnosis of complete obstruction."

Dr. Vance thought it unfair to compare statistics of treatment by palliation with those of operation, because the operation is always after palliative treatment has failed.

Dr. Bernays, of St. Louis, said: "We can relieve these cases in the early stages by local treatment and greatly reduce the number of deaths either by the injection of gas or by very large injections of water. The principle is the same, and I rise to say that complicated apparatus is not necessary, as hydrogen gas has no advantage over common air. You can pump air into the rectum and it will do just as well as

hydrogen gas. An ingenious and original method was resorted to by an acquaintance of mine who attached a tube to a seltzer-water bottle and succeeded in relieving an obstruction which had existed and resisted every means to overcome it for twenty-four hours previously."

A night session was called to order by the president.

Dr. B. S. Coleman, of Lexington, read a paper on Vesical Calculus and Its Treatment. He reported a successful lithotomy on an eight-year old boy. The stone weighed 278 grains, an unusually large one for a child of that age. He recovered rapidly and is now strong and well. Early historians mentioned the frequency of vesical calculus in the second century B. C., and specialists called lithotomists were recognized at that time. Calculi originate most frequently in the kidney, their relative frequency according to Heller being as 100 to 1. They are classified according to their outermost layer into two classes. (1) Uric acid and its allied forms. (2) The phosphatic calculi. As regards the etiology, two great factors are to be recognized: First, those conditions which favor the precipitation of the organic elements of the urine. Second, all those lesions which produce decomposition of the urine in the bladder. Of 5,376 cases of stone in the bladder, nearly one half were under the age of puberty. In males calculi are much more frequently found than in females. All attempts to dissolve stones have met with but little success, and the practice is now virtually abandoned. There are three operative procedures for the relief of vesical calculus: lithotomy, lithotrity, and litholapaxy. Lithotomy is one of the oldest operations known to surgeons, and is always the best operation to adopt in young male children. The surgeon must decide between median, lateral, and supra-pubic lithotomy, and it will depend upon the case as to which method is the best to adopt. The accidents in lithotomy may be numerous, and the surgeon must be constantly on guard to avoid them, and in case of their occurrence must be prepared to remedy them. Lithotrity was first done in Paris, France, by Civiale, in 1822. The new operation, litholapaxy, was first introduced by Dr. Henry J. Bigelow, of Boston. This consists in washing away the debris after the crushing has been accomplished. This method has been generally adopted by surgeons and has almost displaced the operation of lithotrity. Prof. Keister, of Berlin, has within the last year introduced and practiced a new method of removal of calculi through the urethra by means of dilatation. It is called Keister's Modification of Delbeau's Operation, which consists in a para-prostate section of the urethra and subsequent dilata-

tion of the prostatic urethra and neck of the bladder to a size sufficient for the removal of the stone. Keister employed gradual dilatation. He reports twenty successful cases where the calculus ranged from the size of a pea to that of a hen's egg. The operation has been but once performed in this country, and that by Dr. Laplace, of New Orleans, who did it successfully on a patient aged fifty-nine years. Dr. B. W. Dudley lived in Lexington, Ky., and was the most successful lithotomist of his day. He operated two hundred and twenty-nine times and only lost five or six patients. Dr. Bush, also of Lexington, was a successful lithotomist. He operated twenty-nine times and all of his patients recovered.

DISCUSSION.

Dr. A. M. Vance, of Louisville, said: "The essayist mentions one point I have often noticed and remarked, and that is the immunity which the negro race enjoys from difficulties of this character. It will also be observed by close watching that it is rare to see a case of infantile paralysis among them, and the same may be said concerning congenital deformities."

Dr. W. L. Rodman, of Louisville, said: "I agree with the speaker in the advantages claimed for the lateral lithotomy for patients of this age over the supra-pubic operation. I have never been able to see how it was equal in efficacy to the lateral method; at the same time I am not unmindful of the fact that some of the best statistics reported have shown the results of the supra-pubic variety."

"The supra-pubic variety should be limited to the older subjects where the prostate is large. Shock must be considered, and cystitis is generally a complication. In other cases I would give the preference to the lateral operation: it drains the bladder better and shortens the period of convalescence."

Dr. Arch. Dixon, of Henderson, said: "Unfortunately I missed hearing most of the paper, but I take it from the drift of the discussion that it relates mostly to the choice of location of an operation for calculus. I think it is generally recognized that the crushing operation comes first of all; in so far as the supra-pubic operation is concerned, if stones are very large or encapsulated, I think it incomparably better than the perineal. We had a case here in Henderson in which the operation was performed by a visiting surgeon from Cincinnati, in which for two years afterward the child, a girl of eight years, suffered from vesico-vaginal fistula; this, after repeated efforts, was finally closed. If the high operation had been done in that case she would have escaped that

trouble. In encapsulated stone the high operation is the best in any case. In regard to the lateral or median operation, it is largely a matter of individual selection. I saw Dr. Briggs do an operation here which he calls the medio-bilateral operation. It was certainly a successful one. As to drainage, I do not deem it necessary to turn a patient on the belly, because the drainage is good either way."

Dr. McChord, of Lebanon, said: "In every community we find many cases of stone in bladder overlooked, and it is a matter of importance that general practitioners should give greater heed to suspicious cases and recognize them properly."

Dr. David Barrow, of Lexington, read a paper on *Some of the Common Errors in Gynecological Practice and Ills Resulting From Them*, as follows:

He called attention to the importance of the bimanual examination as superior to that by the speculum and sound; and while not condemning their use so harshly as has been done by some, yet he thinks they are used much too often, and are the cause of much of the suffering in women.

Whole chapters in works on gynecology are devoted to pessaries—pessaries large and small, and of every shape imaginable, being pictured; and, as generally used, they do much harm.

Tents are dangerous and unjustifiable; rapid dilatation takes their place, and the results obtained under proper conditions and by proper precautions are gratifying.

Bennett's work, in 1845, on uterine inflammation, popularized intra-uterine medication. Emmet says a whole generation of physicians have been misled by the delusion of chronic inflammation and ulceration of the uterus.

The curette in the hands of the inexperienced is one of great danger.

Since Emmet published his operation on the cervix, physicians have seemed to vie with each other in sewing up cervixes. No matter what symptoms the patient presented, if a new laceration could be detected, the operation for closing it was immediately advised. Many women have been subjected to this operation without the slightest indication, and of course it was a failure; many of them were disappointed when their sufferings continued. However, the operation has been a boon to many suffering women, and in suitable cases I know of no operation where the result is more gratifying to the patient or physician. Every laceration found in the cervix is not necessarily doing harm, and when it is not extensive, or not producing symptoms requiring relief, I

should advise letting it alone. Most of us have patients in whom this lesion has been discovered accidentally, and, from the history obtained, has evidently existed for many years, and no discomfort or distress has been experienced. Dr. Emmet himself has recognized the abuse of this operation, and has advised against its indiscriminate performance. Any inflammation about the uterus is a contra-indication to the performance of Emmet's operation; I can recall patients made worse by the operation when inflammations existed in the tubes.

It was my intention in the beginning of this report to discuss the errors often seen in the treatment of inflamed, degenerated, and adherent tubes and ovaries; but so much time has been occupied with other subjects that I will have to pass by with but a superficial mention of them. Patients afflicted with these diseased organs are invalided, and can never recover so long as they are allowed to remain, and the sooner they are extirpated the better are the chances of saving the patient; and if the physician is not a laparotomist, it is his duty to refer the patient to one for operation. It is true that these patients frequently improve for a while with the use of temporizing means, for the urgent symptoms are more often due to the acute peritonitis present, and when this subsides the patient improves, but invariably the peritonitis will recur, and the condition again becomes as serious as it ever was. When the tubes and ovaries become matted together in organized inflammatory material, nothing is accomplished with temporizing means, such as electricity and vaginal douches; there is but one thing to do, and that is to open the abdomen for all adhesions and remove the diseased organs.

To Dr. Joseph Price, of Philadelphia, is due the highest credit for bringing before the profession of this country the gravity and frequency of this form of pelvic disease, and demonstrating the efficiency of this treatment by a large and brilliant series of operations, with unsurpassed results.

Any one skeptical on this point has but to read the proceedings of the Philadelphia and other medical societies during the past year, and he will, I believe, be convinced that the operation is essential for the cure of one of these patients. I have seen Drs. Jos. Price, Penrose, and others, open the abdomen frequently, have seen and handled the specimens removed, and have watched the patients from day to day during convalescence, and not once have I ever seen the abdomen opened when the justification of the operation could have been questioned; but I have seen women in-

valided, and whole families made miserable, because opening the abdomen was considered too radical a measure. To operate mainly to get a long list of "brilliant results," as some insinuate has been done, is a procedure nothing short of criminal, and any well-balanced physician will condemn it with every power he can marshal to his aid. But when there is disease that can be felt with the fingers, that we know can never be gotten rid of by any thing short of removal, and that has kept the woman miserable two thirds of the time, frequently for many years, and will ultimately destroy her life, it is our duty to that woman, to her family, and to ourselves to offer her the best means we know of for cure, and that certainly is extirpation of the diseased organs by opening the abdomen. If we consider what a large number of women die from so-called pelvic cellulitis and idiopathic peritonitis, conditions commonly resulting from diseased tubes and ovaries, and, in reality, septic peritonitis, we can form some idea of the frequency and gravity of these lesions. In skilled hands operation by abdominal section, which gives permanent cures, involves even less immediate danger for the patient than the delay of so-called expectant and conservative treatment.

Dr. Turner Anderson, of Louisville, said: "This paper will be read with much pleasure by many, and by many with a great deal of profit. I think we have about gotten to the point in gynecological examinations where the uterine sound will be dispensed with. It is a surgical instrument that should be resorted to seldom. It is unnecessary; one skilled in bimanual examination scarcely ever requires it.

"Again, in regard to the tent, we know that any agent which absorbs as a sponge tent does from surrounding tissues, and rapidly undergoes decomposition, is certainly a dangerous implement. I seldom resort to it since we have so much better means at hand in the operation and instrument of Goodell. Rapid dilatation, according to the rules so plainly stated, is an operation without danger; at least it has so proven in my hands."

Dr. J. M. Ray, of Louisville, read on the Ophthalmoscope as an Aid to the Diagnosis of Certain Diseases of the Central Nervous System. (See p. 361).

Dr. W. L. Rodman, of Louisville, read an interesting paper on the Regional Study of Tumors.*

A. C. Bernays, of St. Louis, read on Early Laparotomy in Ectopic Gestation. The paper was a report of two cases in which the operation was successful.†

DISCUSSION.

Dr. L. S. McMurtry, of Louisville, said: "Cases of extra-uterine pregnancy are very common indeed, and the diagnosis is very difficult. The coroner's examining physician for the city of Edinburgh in one year found nineteen instances of extra-uterine pregnancy that had never been diagnosed. I venture that Dr. Bernays alone will see six cases within the next year. When rupture has occurred, I know of no operation that requires such an exhibition of courage as these require. On opening the abdomen a gush of blood comes that is calculated to make any one tremble. A case occurred to me last July in which the wife of a physician in Georgia was visiting Kentucky, in whom the rupture had occurred six days previously. The woman had peritonitis, tympanites, a temperature of $103\frac{1}{2}^{\circ}$, pulse 138. Two quarts of blood-clot were found, and a rupture of ectopic pregnancy on the right side.

"I should like, if time permitted, to speak of cases in which I have operated at full term, and were undergoing absorption with the putrid fetus lying loose among the intestines."

Dr. W. H. Wathen said: "I have operated twice for extra-uterine pregnancy. I have seen a case where the pregnancy was interstitial, when the rupture occurred into the uterus and the membranes were expelled from the uterus. I wish to emphasize what has been said relative to the difficulties of diagnosis during the first two or three months of ectopic pregnancy. It is hardly possible for any one to make an absolute diagnosis in these cases, though an operation subsequently may prove we have been correct. The same symptoms may be present in other pathological conditions in the pelvis.

"Laparotomy is the only rational and safe treatment. In the earliest months the operation should be a very difficult one. Had I been operating in the case mentioned I would have flushed the cavity with very hot water, and cleansed it of blood clots."

In closing the discussion, Dr. Bernays said: "The rise in temperature in the case mentioned was not variable; it did not go up and down, but was constant, varying perhaps but a tenth or a fifth of a degree morning and evening.

"I don't think the drainage tube would have reduced the fever in that case; I simply relied upon the ability of the tissue of the peritoneum to get away with a certain amount of aseptic blood mass. I should consider it a highly dangerous proceeding to flood the cavity with water that was not certainly and absolutely clean."

* This paper will appear in an early issue of this journal.

† This paper will appear in our next issue.

FRIDAY MORNING'S SESSION.

The secretary, Dr. J. Steele Bailey, of Stanford, read the names of the members of the standing committees as follows:

COMMITTEES.

Committee of Arrangements—David Barrow, Chairman, Lexington, B. L. Coleman, Lexington, M. T. Scott, Lexington, J. Y. Oldham, Lexington, L. B. Todd, Lexington.

Practice of Medicine—B. L. Coleman.

Practice of Surgery—Ap Morgan Vance.

Obstetrics—Turner Anderson.

Materia Medica—Ewing Marshall.

Ophthalmology—J. M. Ray.

Otology—M. F. Coomes.

Vital Statistics—T. B. Greenley.

Laryngology—S. G. Dabney.

State Medicine—J. N. McCormack.

Hygiene—Pinckney Thompson.

Genito-Urinary Diseases—John Young Brown.

Diseases of Children—J. P. Thomas.

Gynecology—W. H. Wathen.

Abdominal Surgery—Louis S. McMurtry.

Intubation—Wm. Cheatham.

Diseases of the Rectum—Jas. M. Mathews.

Surgery of the Brain—W. L. Rodman.

Pharmacy—Andrew Seargent.

Epidemics—J. G. Brooks.

Clinical Microscopy—Simon Flexner.

Dermatology—Sam. M. Letcher.

Surgery of Bones—R. C. McChord.

Report on Scarlatinal Throat Affections—Thos. Hunt Stucky.

Report on Otitis Media—A. H. Kelch.

The following resolution to amend the Constitution was presented by Dr. James H. Letcher, of Henderson, and by a unanimous vote received, and as prescribed by the Constitution will stand over one year for final action.

Resolved, That Section 2, Article 10, of the Constitution be so changed as to read as follows: Each officer shall be elected, after recommendation by the Nominating Committee, which committee shall be made as follows: Immediately after the close of the first session of the Society, the members present shall organize themselves into eleven conventions, according to the congressional districts in the State, all members present from the first congressional district constituting one convention, and so on, for the eleven districts, each convention to elect one member of the Nominating Committee, except the convention of the fifth (5th) congressional district (in which is situated the city of Louisville), which shall

elect two members. The chairman of each convention to report their members at the next session, the President then to appoint the thirteenth, he to be chairman of the committee. The election shall take place at the annual meeting of the Society, on the second day of the session, after reading the proceedings of the preceding day, and each officer shall serve for one year, or until another is elected to succeed him.

Dr. J. O. McReynold's paper was then read on the Advantage of Cutting off Both Ends of the Silk Ligature and Closing the Wound over it in all Amputations.

He said: "In amputation, the old plan of cutting off one end of a ligature placed around an artery and drawing the other out at the angle of the wound should be abandoned, and that both ends should be cut short and the wound closed, when cat gut ligature is used, will hardly be questioned; but that this can be done with equal safety when the ordinary twisted silk is used will be denied, I presume, by most practitioners, because it is contrary to the usual teaching on the subject.

"On July 16, 1866, I amputated the leg of a young man, and inadvertently cut short both ends of the ligature (twisted silk).

"At the time I regretted this, but there was no help for it. So I closed the wound and awaited results. It healed unusually well, and the retained ligature has never given any trouble.

"From that date I have in all amputations cut as short as possible both ends of the ligature applied to the arteries, and have used only the common twisted silk. I have no record of my cases, and am unable to state the number in the last twenty-four years. In none of them have I had the least trouble with the retained ligature, and there has been a sufficient number of amputations to lead me to believe that in a large majority if not all instances this plan can be safely followed.

"Last fall Dr. J. M. Zarecor amputated a leg in which he ligated with braided silk six arteries. Two of these ligatures have since come out through the cicatrix, causing some pain and suppuration. This is the only instance I have known in which there has been any trouble from the ligature.

"If the silk ligature left closed up in the wound gives rise to no more trouble than the cat gut, the advantage and convenience of using it in preference is so obvious as to require no argument. To call forth an expression of the personal experience of the members of the Society not as to what the books say, but what they have themselves observed, is the object of this paper.

"In medicine as in religion it is well to examine the foundation of our faith to see whether it rests on facts or merely the traditions of the fathers."

DISCUSSION.

Dr. M. T. Scott, of Lexington, said: "I have practiced the method indicated, and I believe it to be just as good treatment for the ligatures in the stump as it is to leave them on the pedicle in laparotomy for ovarian diseases."

Dr. J. H. Letcher said: "This subject is one that should have been brought more prominently before the Society, because all the country practitioners have to do operations of this kind. I know myself of two cases in which the practice was carried out with good results."

A paper was read by the Secretary on Rhinology by M. F. Coomes, M. D., of Louisville. Dr. T. B. Greenley, of West Point, read on A Comparison of Birth-rate Between Civilized and Semi-barbarous Nations.*

Dr. Greenley took the ground that in advanced and civilized people the birth rate has become so low that in the absence of sanitary conditions which have been instituted would render the population extinct. In this connection he called attention to the fact that in the New England States the birth rate exceeds the death rate by a very small percentage only, and if it was not for the prolific foreigners it would be materially less, the birth rate among the native women being but 9.4 per thousand, while among the foreign element it is 29 per thousand, there being but little difference between the birth rate in the Southern States and that of the foreign element in Massachusetts.

The causes for this state of affairs the essayist finds in the evils of high life and the deteriorations produced in the functions of various organs consequent upon the customs that prevail in highly civilized communities of tight lacing, late hours, exposures, indigestible foods, free use of wine, etc.

Alcohol and syphilis are avoidable causes of diseases that shorten life; the number of deaths resulting from these factors he estimates at 100,000 annually.

Consumption destroys twelve to fourteen per cent, although many sanitarians entertain the utopian idea that the time is not far distant when we will be able to control its prevalence. So far I believe isolation has not been advised by our scientists; contagiousness of the disease is not regarded as a true theory; consequently heredity occupies a higher position as a factor of importance.

DISCUSSION.

Dr. Hammer said: "The speaker gives as his opinion that the birth rate is greater in the Southern and Middle States in proportion to population than in the Eastern States or in Massachusetts. May not the fact that the proportion of women is far in excess of the men in that State have something to do with such a result?"

Dr. J. A. Ouchterlony said: "I was profoundly interested, as I always am, by the thoughtful, philosophical paper presented by Dr. Greenley. There is one thing in the paper that especially struck me, and that is what the doctor said about tuberculosis. It is a subject of such vital importance, and one which we have to deal with at every turn, that we can not very well shut our eyes to any thing that pertains to it.

"Isolation in tuberculosis has been tried not practically, but in a very imperfect way. It was not known at that time that tuberculosis might be transmitted in articles of food and from the lower animals, and hence the mere connection of association with others of their kind would have no effect. Besides that, the means of diagnosis were exceedingly defective. They were made by auscultation. Even at the present time large numbers of physicians make use of this means to a limited extent.

"I read a paper last year at Richmond in which I ventured to offer some practical rules for the prevention of the disease. All efforts at prevention must be based upon the recognition of the fact that it is a communicable disease exactly as syphilis and small pox and other infectious diseases are.

"I must differ from my friend on one or two points: It is not only a theory that tuberculosis is produced by a bacillus; it is an established fact. If it is not established, nothing is established; it is as certain as we are of our own existence; it has been demonstrated in hundreds of thousands of experiments.

"All communicable diseases are not communicable in the same degree. Scarlet fever is not as contagious as measles, and it is a good thing for us it is so. Then, again, the susceptibility to disease plays an important part. I have known persons so endowed with immunity to small pox that they could sleep in the same bed with a small pox patient and never take the disease, though not protected by vaccination.

"We know that the children of tuberculous parents are generally healthy looking; they appear to show no evidence of the disease. As a rule, it is not a congenital or inherited disease; inherited diseases manifest themselves early. Who ever heard of a case of congenital syphilis

* Will appear in an early issue of this journal.

developing in a lad of sixteen. It is then acquired. All we can say of heredity is that the disease is not inherited, but that the parents transmit an intense receptivity, so that the child receiving the poison in the system the disease develops most subtly and surely."

Resolutions of thanks were then voted to the officers of the Society, railroads of the State, the citizens, the profession, and the press of Henderson, and the Society adjourned to meet at Lexington next May.

TREASURER'S REPORT.

Dues collected at Richmond, Ky., \$244.41, disbursed as follows:

Secretary's salary.....	\$100 00
Stenographer	15 00
Page.....	2 00
Paper, pens, etc.....	1 00
Richmond "Climax"	9 50
Dr. J. M. Foster	8 50
Janitor.....	6 00
Rogers, Tuley & Co.....	43 34
W. P. Walton	13 25
W. P. Walton	31 00
C. D. Hickey.....	10 00
W. L. Ringo.....	2 00
Courier-Journal Co.....	3 45
	<u>\$245 04</u>

It will be seen from the above that the "surplus" has been expended. At the Richmond meeting it was resolved to donate the surplus to aid in suppressing charlatanism in the State. \$10 was contributed to C. D. Hickey as fee for prosecuting a quack.

Respectfully submitted,

J. B. KINNAIRD,

LANCASTER, KY., May 12, 1890.

Treasurer.

REPORT OF THE PERMANENT SECRETARY.

It gives your secretary very great pleasure, in this his fifth annual report, to announce that since our last meeting the blessings of health have been granted to every member of this Society; at least, if a death has occurred in our ranks, notice of the same has failed to reach this office. For these and other good things accruing to us we are thankful.

The Kentucky State Medical Society at present numbers two hundred and fifty-four working members. This number, though handsome, is by no means proportionate to the number of regular physicians in our Commonwealth; nevertheless the enthusiasm with which we are gifted is amply demonstrated by the contents of this year's programme, which is unusually rich and varied.

I believe that neither in writing nor deeds are we lagging behind other State organizations.

For the past three or four years the Secretary has been frequently importuned, by both

old as well as new members at the regular sessions and during the intervals, for copies of the Constitution and By-laws. He was authorized by the society at its June meeting in 1886, at Winchester, to have the printing done, but after liquidating all indebtedness that season we were then as now suffering the slings and arrows of outrageous fortune, and being new in the harness he hesitated about incurring a debt out of which he couldn't see his way clear; but this year the imperative necessity of such publication having arisen, the interests of the Society absolutely demanding it, he has gone ahead, after casting about for one to do the job the cheapest, and had printed by Messrs John P. Morton & Co., of Louisville, 500 copies of the Constitution and By-laws, at a cost of \$85, which is low for the character of work done. I trust that during the present session by means of dues received we may be able to liquidate this as well as other outstanding indebtedness. If I see that this can not be done, I will so advise this honorable body and let measures be suggested later in the session for the accomplishment of this purpose.

Credentials were sent the following gentlemen and their alternates also to attend as delegates at Washington, D. C., the convention which met in that city on the 7th inst. for the Revision and Publication of the U. S. Pharmacopeia: Dr. Wm. Bailey, Louisville, Dr. J. H. Larrabee, Louisville, Dr. H. Orendorf, Louisville. Alternates: Dr. J. N. McCormack, Bowling Green, Dr. J. H. Letcher, Henderson, Dr. David Barrow, Lexington.

We had some difficulty in being officially represented in this convention; it was necessary to send our charter for inspection. To do this, a type-writer had to be procured from the Secretary of State at a cost of \$3.25. I courteously asked Dr. Amory Boston, the President of the Association, to return this instrument of writing that we might use it at the next decennial revision (D. V.).

We have been called upon but once to furnish funds to carry out the Medical Practice Act. At this time a \$10 fee was given Mr. C. D. Hickey, attorney at law, at Glasgow, to prosecute an illegal practitioner in the county of Barren. I understand the case has been appealed, and the legality of the act will be fully tested. If this be so, other funds must be furnished for the defense of the case.

The Secretary would draw the attention of the Society to the election of new members. In the past the entrance into the Society has been rather easy, as you all know, and for this reason on more than one occasion the Committee on Credentials have been criticised, for those men did not meet the requirements of the

Constitution and By-laws. For instance, a very clever gentleman was elected at the Crab Orchard meeting in 1888 who had never attended a course of medical lectures. By filling properly the printed applications we have recently adopted, greater security will be given the Society.

I am gratified to announce that through the efficient management of the Committee of Arrangements the railroads operating in the State of Kentucky have granted a reduction of rates to members of this Society and their families, for which kindness we return thanks.

An itemized account of my expenditure for the current year in behalf of the Society accompanies this report, all of which is respectfully submitted.

STEELE BAILEY,

Secretary, K. S. M. S.

Itemized account of the Secretary, Dr. Steele Bailey:

Paid out of his own fund to J. P. Morton & Co., for paper, letter heads, and envelopes.....	\$7 50
Paid Secretary of State for Charter.....	3 25
Paid expressage.....	3 50
Paid stamps, envelopes, postal cards, etc.....	15 00
Expressage to Henderson, May 14th, of books, 70 and 80 cents.....	1 50
	<hr/> \$30 75

NOTE. The Relation between the Nose and the Eye in Disease, by John Y. Oldham, M. D., of Lexington, was read by title, as was also a paper on the Management of Abortion, by Andrew Sargeant, M. D., of Hopkinsville.

Abstracts and Selections.

NONA.—An epidemic disease, the principal feature of which is prolonged sleep, has recently made its appearance in Germany, several cases having occurred in the province of Hesse. The disease is called nona, and at first was thought to be a new one. The victims sink into a prolonged sleep, lasting for several days, and finally terminating in death. Marked evidences of pneumonia are observed at the same time.

The peculiar character of this disease will be best understood from the history of a case, which is reported by Dr. Braun, of Bolkenhain, in the *Deutsche Medicinische Wochenschrift*, March 27, 1890. The patient, a girl fourteen years old, was suddenly seized with severe headache accompanied with high fever. Great drowsiness soon overcame the child, and she fell into a deep sleep. If aroused, she would stare vacantly about her. She did not speak, and seemed not to recognize any one, and if let alone would immediately fall asleep again. On examination the pupils were found to be dilated, and they reacted but sluggishly to the

light. The color of the lips and face was decidedly cyanotic; the tongue was dry and covered with a blackish coat; the respirations were rapid, but regular; the pulse was 110 in the minute. The temperature was very high, and there was profuse perspiration. Urine and feces were voided unconsciously. The child had a stiff neck, and if her head was moved forward she gave evidences of pain. There was no paralysis. An extensive pneumonic infiltration of the middle and lower lobes of the right lung was found. The case was clearly one of pneumonia, combined with cerebro-spinal meningitis. The presence of meningitis and the involvement of the sensory centers accounted for the absence of cough and symptoms of pain in the chest.

When the patient was seen by Dr. Braun, the pneumonic crisis had been reached, and the chest symptoms soon began to improve. The meningitis did not improve. The child's condition became more and more alarming; there was no sign of returning consciousness; convulsions became frequent, and in six days after the first appearance of the disease the child was dead.

In view of the most recent researches in the etiology of pneumonia and cerebro-spinal meningitis, the disease "nona," as illustrated in the above case, is most interesting. In nona pneumonia and meningitis occur simultaneously. At first the meningitis symptoms are most prominent, and completely mask the pulmonary condition, until the latter is well developed. Recent bacteriological researches indicate a close connection between these two diseases, the pneumococcus having been found in cases of cerebro-spinal meningitis as well as in pneumonia.

As the number of cases of inflammation of the lungs in Germany has been very great since the recent epidemic of influenza, the theory has been advanced that the present outbreak of nona may be due to the poison of influenza. Nona can not be regarded as a new disease, but is a combination of two known ones. The most active treatment exerts no apparent effect upon the course of the disease, a fatal issue having occurred in all the cases reported. *Medical and Surgical Reporter.*

SALICYLATE OF SODA IN DYSMENORRHEA.—Reynolds and Haven (Boston Med. and Surg. Jour.) have had excellent results from the use of salicylate of soda in dysmenorrhea. The action they think is only temporary, but the relief from pain most marked. They gave it in ten-grain doses three times a day for one week before the catamenia, and afterward as long as the pain had usually lasted.

The American Practitioner and News

"NEC TENUI PENNĀ."

Vol. IX. SATURDAY, JUNE 7, 1890. No. 12.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the EDITORS OF THE AMERICAN PRACTITIONER AND NEWS, Louisville, Ky.

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JOHN P. MORTON & CO.
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MEDICAL COLLEGE CONVENTION.

The deans, with other professors, of a number of the medical schools of the land met in Nashville on the 21st ult., and effected an organization looking to reform in medical education. They take the name of "National College Association."

The following officers were elected: President, N. S. Davis, Chicago; First Vice-President, Aaron Friedenwald, California; Second Vice President, H. N. Didama, Syracuse, N. Y.; Third Vice-President, T. Menees, Nashville; Fourth Vice-President, Sam. Logan, New Orleans; Fifth Vice-President, W. H. Pancoast; Sixth Vice-President, C. A. Lindsay; Seventh Vice-President, W. T. Peck; Secretary and Treasurer, Perry H. Millard, of St. Paul, Minn.

Their creed, so far as the items have been determined, is, "That all colleges of the Association adopt a three years' graded course; that the examination be both oral and written; that laboratory instruction in chemistry, pathology, and histology be required; that an admission examination be held, and that the secretary of each college transmit to the secretary of the Association a list of all the matriculants in his institution, together with a copy of

the questions asked at the examination for admission."

It is to be hoped that this organization will fare better than the one of not many years ago.

THE STATE SOCIETY.

This issue of the American Practitioner and News, like the last, is devoted to the papers and proceedings of the State Society. We believe that our readers will appreciate the effort we have made to place in their hands a full report of this unusually fruitful meeting. A glance at the report as herein pre-ented will show that little outside of science was considered. The reports of the Secretary and Treasurer show that the Society is, in a worldly sense, well and prosperous.

The address of the Kentucky Pharmaceutical Association makes good reading, and calls the attention of the doctors to some defects in our State laws, to the mending of which we should lend our influence and our votes.

The resolution offered by Dr. J. H. Letcher relative to the nomination of the Society's officers is an improvement on the existing arrangement, and will probably become a law next year.

The next meeting will be held in the historic city of Lexington, amid environments dear to every true Kentuckian. Its success is assured.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.

The regular annual meeting of this Society was held on the night of June 6th. The officers elected for the ensuing year were: President, Dr. A. M. Cartledge; Secretary, Dr. F. C. Simpson.

The retiring president, Dr. J. M. Ray, delivered the address, which reviewed in fitting terms the work of the Society during the year. The speaker interspersed the items of the review with numerous well-timed and thoughtful suggestions. At the close of the meeting the Fellows sat down to a collation prepared by the genial host, Dr. Turner Anderson.

Notes and Queries.

PREPARATIONS OF NAPHTHOL.—Naphthol is often prescribed in potions which are usually made by dissolving it in twice its weight of ether, alcohol, or glycerine, and adding the solution to the potion. According to M. Mainiel, naphthol dispensed in this way soon precipitates. He proposes that the naphthol be dissolved in ten times its weight of the oil of sweet almonds.—*American Journal of Pharmacy.*

PASTEUR INSTITUTE AT BUDA-PESTH.—The *Deutsche Medicinal-Zeitung*, March 31, 1890, announces the proposed establishment in Buda-Pesth of a Pasteur institute, as it is convenient to call places where the method of Pasteur for prevention of hydrophobia is systematically practiced. The institute is intended also for the study of protective inoculations in general. The chief officer will be Prof. Höyges.

HYDROPHOBIA IN PARIS; PASTEUR INSTITUTE STATISTICS.—The *Bulletin Médical*, March 26, 1890, reports that in the year 1889 there were treated at the Pasteur Institute 236 persons from the Department of the Seine (Paris) alone, supposed to have been bitten by rabid dogs. Of these persons three died after treatment. During the same period three other persons died of hydrophobia in Paris.

PROF. E. LEYDEN.—Almost a quarter of a century has elapsed since Prof. E. Leyden was appointed director of the medical clinic in Königsberg. His pupils, therefore, have prepared to celebrate this event on the 6th of April, the intention being to present him with a memorial address and an album of photographs, as well as to erect a bust of the professor.

The Board of Health of Philadelphia, on April 22d, directed its chief milk inspector to prosecute seven dealers who were alleged to have continued to sell diluted skimmed and colored milk in violation of the act of Assembly, after having been notified of the same. It was resolved to ask city councils to pass an ordinance to prohibit the sale of adulterated or impure milk.

MALIGNANT diphtheria is said to have been recently epidemic in the village of Vining, Minn., which has a population of about 150 persons, nine tenths of whom were afflicted with the disease. There were twenty deaths between April 1st and April 23d, and thirty altogether. The funerals of all the victims have been public and largely attended.

It is reported that two families, consisting of sixteen persons, were poisoned last week in Franklin County, Arkansas, by eating wild turkey, and twelve of them, up to the last accounts, were not expected to survive. It is believed that shortly before being shot the turkey ate some strychnine bait which had been set for wolves.

THE sixty-ninth annual commencement of the Philadelphia College of Pharmacy took place April 17th. The valedictory address was delivered by Professor Joseph P. Remington, Ph. M. Among the graduates were five women, two of whom did not receive their diplomas, being under twenty-one years of age.

A PROFESSOR in the University of Klausenburg claims to have compounded a solution which completely neutralizes the poison introduced into the system by the bite of a mad dog. This solution consists of chlorine water, salt brine, sulphurous acid, permanganate of potassium, and eucalyptus oil.

AN epidemic of typhoid fever is said to have broken out in Augustana College, at Rock Island, Illinois. One student has died, and many others and a professor are dangerously ill. Defective sewerage in the main building is said to be the cause, and it is being remedied as quickly as possible.

DR. E. VON WAHL, Professor of Surgery at Dorpat, and editor of the *St. Petersburger Medicinisch. Wochenschrift*, is dead.

THE UNITED STATES SENATE, on February 27th, passed a bill making the salary of the Surgeon-General of the Marine Hospital Service \$6,000 per annum.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. IX.
[NEW SERIES.]

LOUISVILLE, KY., JUNE 21, 1890.

No. 13.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

BIRTH- AND DEATH-RATE OF ADVANCED CIVILIZED PEOPLES COMPARED WITH THOSE IN SEMI-BARBAROUS STATE.*

BY T. B. GREENLEY, M. D.

Pope says: "The proper study of mankind is man." If this statement holds good in its application to people generally, it should much more be incumbent on medical men to obey it. After we have made ourselves conversant with the structure and functions of the various organs of man as an animal, we should then turn our attention to the spiritual or mental man; this, perhaps, is as much or more of a task than that pertaining to animal man. Yet, as medical men, it behooves us in a very great degree to familiarize ourselves with man's mental nature, so that we can comprehend the various phases of mental phenomena that may be presented at the bedside. Some may say, in order to do so we must study mental philosophy. This in a measure is true; and, should we become mental philosophers or true psychologists, so much the better for us and our patients. We all must acknowledge that in many cases it is equally as essential to treat the mental as it is the physical man. May this not be mainly the secret of success obtained by the followers of Hahnemann in the management of their cases? They assure the patient that if he follows the prescribed directions fully that he will get well. If there is functional derangement of the digestive apparatus, the doc-

tor will prohibit the use of coffee and tea, and most every thing else, but makes it essential that he must take a few little granules of the thirtieth dilution every two or three hours, and "if you follow these directions strictly you will be well in a few days."

Now it will be seen, in an instance of this kind, that the dietetic plan was most excellent, and the assurance given to the mind cured the patient, the medicine being merely a placebo. Here is an instance of mental philosophy in a practical way and properly applied; and one that might be regarded as a good lesson to be learned, to wit, where there is but little the matter, do but little. There is scarcely any dogma, pathy, or ism, of the very many that have been introduced into medicine, out of which something good may not be gleaned if properly investigated.

It is presumed by many students of medicine that when they have familiarized themselves with the structure of man, and have studied the various ailments he is heir to, with the remedial agents applicable to them, that they have completed their medical education. In a business point of view this is mainly correct; but are we, as a profession, mere business men, having for our only object the acquisition of wealth? I hope not. Then it behooves us as Christians to unite our business qualities to those of philanthropists and sanitarians. We should not only relieve human suffering in the cure of disease, but use our best endeavors to prevent it, and in order to do this we must become philosophers. This much preliminary to the subject under consideration.

In this paper I wish to show that in advanced civilized peoples the birth-rate has become so low that in the absence of sanitary conditions which have been instituted by medical men, by which longevity is effected, the popula-

*Read at the May Meeting of the Kentucky State Medical Society, 1890.

tions would soon become extinct. The birth-rate in the New England States at the present time only exceeds the death-rate by a very small percentage, and if it was not for the prolificacy of the foreign element it would be much below.

We will take the State of Massachusetts as a fair sample of highly civilized people. "In the six years from 1876 to 1881 inclusive there were born of native parents 126,429 children, and of foreign parents 128,820, when in 1880 the population consisted of natives 1,339,595, and foreigners 443,491. It will thus be seen that the birth-rate among the foreign-born population greatly preponderated over that of the native, being equal to over three hundred per cent in favor of the foreign. During this period there died, natives 156,225, and foreign born 40,716; a difference between the native death- and birth-rate of 29,796, whereas the birth-rate of the foreigners exceeded the death-rate 87,824. As the dead among the children of the foreign born population were counted as natives, some deduction on this account should be made. The birth-rate among the native women was 9.4 per 1,000 inhabitants, while that of the foreign was 29 per 1,000. It may be thought by some that the difference between the birth-rate of the two classes of peoples is due to the greater prolific bearing of foreigners over that of our own people, but when we find that the white women of the United States at large averaged 30.35 per 1,000 of the white population that conjecture is without significance.*

But when we come to inquire into the difference between the birth-rate in the Southern States and that of Northern and Western States, we will find that there is but little difference between the latter and the foreign population of Massachusetts.

In the census year 1880, for every 1,000 women in the United States between the ages of fifteen and forty-nine inclusive, there were born 127.5 children, or 30.35 to 1,000 population. Of the white women of the South 153.2 per 1,000, or 36.3 per 1,000 inhabitants; and of the colored women of the South 170 children per 1,000 were born,

or 33.6 per 1,000 population. Of the women of the North and West 115 children per 1,000 were born, or 27.2 per 1,000 population.

Of the women of the New England States, there were born 82.2 children per 1,000, or 22.2 per 1,000 of population.

In Massachusetts there were born 82.9 children per 1,000 women or 24 per 1,000 inhabitants. From this exhibit it will be seen how the population of the State is kept up. I get the statistics pertaining to the native and foreign population of Massachusetts from a report made by Dr. Ellis, of New York, published in 1884. In speaking of the deplorable condition of the population of that State he remarks: "The fact, nevertheless, stands before us, that the foreign born inhabitants of Massachusetts, numbering less than one fourth of the population of the State, give birth to more than one half the children born in the State. It is perfectly clear, therefore, that without a radical change in religious ideas, education, habits, and customs of natives, the present native population and their descendants will not rule that State a single generation, say thirty-five years hence."

When I first considered the task of writing this paper I thought I would be able to get the vital and mortuary statistics of some country not high up in civilization, say Japan, China, or even Turkey or Persia, but on diligent inquiry I found there were no such statistics to be obtained in this country. I therefore have been compelled to take our Southern colored population by which to make a comparison between the birth and death-rate of that people and that of a civilized State like Massachusetts. I select Massachusetts, not because its birth-rate is lower than any other State, but because the statistics of the native and foreign population are, perhaps, more correct than that of any other State in the Union, and also because she is regarded as being high up on the ladder of civilization.

To be sure we can not make as satisfactory a comparison as we could if we had the proper statistics of say China; for I am satisfied that the sanitary condition of our colored population in the Southern States is much better than that of China; but the former will, I hope,

*See United States Census, 1880, Part 11, Mortality and Vital Statistics.

subserve the purpose for which I wish to make the comparison. Our colored population is, doubtless, better clothed and fed, and have much better sanitary surroundings, being to a greater or less extent under the supervision of intelligent whites. The difference of birth-rate between the blacks and whites of this country is 7.71 per 1,000 population, or 42.5 per 1,000 women, in favor of the colored race.

Then, if we compare the birth-rate of this people with that of the most civilized people of this country, to wit, Massachusetts, we have the following difference: Blacks 38.06 and natives of Massachusetts 9.40, or 28.66 per 1,000 inhabitants in favor of the former.

In the death-rate of the population of Massachusetts at large and that of the colored people of the South there is no great difference, being about 1 per 1,000 in favor of the latter. Owing to the fact that the last census of the United States did not separate the two races in several of the States, making it impossible to get the exact death-rate of the whole colored population separately, I base my calculation on the census of ten States, including those of the Gulf and South Atlantic coasts, with the District of Columbia. The death-rate in this population in 1880 was 17.4 per 1,000, and for the same year in Massachusetts 18.6; but this slight difference could not be due altogether to the want of proper sanitary conditions on the part of the latter. It was due mainly to certain causes, which I shall hereafter mention, pertaining to a high state of so-called civilization.

Now we will endeavor to inquire into the causes of the great falling-off in the ratio of increase of population among highly civilized peoples over that of people in a state of semi-civilization.

In the first place the mode of living varies greatly with the two classes. What is termed high or fashionable life among women tends greatly to impair the functions of the various organs, and whatever impairs the functions of other organs reacts deleteriously on the reproductive organs.

By tight lacing, late hours, exposure, many times deficient and improper clothing, eating improper and indigestible food, and in many

instances the free use of wines and other liquors, the system soon begins to feel the evil effects of such violations of the laws of health, and, if these habits are long persisted in, loss of vitality and premature decay will supervene.

Now, a woman of this class is almost incapacitated from having children; in fact she does not want any, and, in justice to childhood, she should not have any. But, although this course of life militates greatly against pregnancy, she, for fear she may conceive, will in many instances resort to means to prevent it. And in many instances, under the prejudice against the care that childhood imposes, she will, if pregnancy does occur, resort to measures to destroy the embryo. These means, both to prevent conception and to destroy the fetus *in utero*, react dangerously on the health of the woman, if by the use of the latter she escapes with her life. In the event that women occupying this position in fashionable life should, by chance, have children, they are usually very delicate, and, as a rule, are put off with perhaps a careless wet nurse, or if a nurse of this character can not conveniently be obtained, the little mite is put on a bottle, and in either case, as a general thing, its duration of life is a question of but a short time. This class of women, as a rule, can not think of nursing their own children. It is a very observable fact now in this country that the middle and lower classes are doing much the largest share, in proportion to numbers, of keeping up the population. If this devolved on the millionaires and fashionable classes we would soon become depopulated. It is very common for rich or noble families to die out. This has occurred frequently in England, when it becomes incumbent on the Crown to create new nobles to take the titles of extinct families. This all results from causes above recited as being due to what is termed a high state of civilization or fashionable life. But, in many other instances, as before remarked, it is due to late marriages, the want of philoprogenitiveness, abortions, etc. Then again, it is becoming very fashionable of late years for young women, in the New England States more particularly, to be educated somewhat

like men. Their ambition is excited to engage in a business way, in many instances, the same pursuits that men solely have heretofore followed. In other words, you might designate them as men's rights women, although some of them claim to be "women's rights women." Now it seems to me that this would tend to so far unsex them that it, to some extent, would repel the attentions, as well as the affections of that portion of mankind heretofore known as the sterner sex. Be this as it may, I am confident that in many instances it causes delay of marriage till a time of life when prolific results are less apt to ensue, to say nothing of the loss of time during the proper child-bearing period. There can be but little doubt that a high state of civilization is very detrimental to prolific child-bearing. It may be said also to tend greatly to diminish that maternal love and care of offspring which naturally should and do belong to the good and natural woman.

I have always thought that when civilization advances so far as to obliterate the line that should properly separate the sexes in the various avocations of life, it is trenching on dangerous ground, as far as the mutual happiness and welfare of men and women are concerned in a connubial sense. Men and women should be raised to know how to do something by which they can gain a livelihood in case necessity should make it obligatory for them to do so. But each one's occupation should be confined to this proper sphere.

There is no good man who wishes to live a happy life that would like to marry a masculine woman. Of course he could not expect her to manifest and practice all the domestic affections pertaining to married life as she would if she had been raised to appreciate and cultivate the affections usually embraced in the domestic circle. A woman of this character, devoted to home circles, no matter how advanced she may be in all the accomplishments of education, will be more prolific in child-bearing than her sister who observes the tenets and practices of extreme fashionable life, and, being more domestic in character, will take better care of her offspring.

The problem of population has been a theme

that has engaged the attention of some able men. Malthus wrote on the subject nearly a century ago, and endeavored to solve the problem of dense populations by their relations to sustenance. He predicted that populations would gradually diminish as the food supply lessened, which would soon ensue on account of impending loss of fertility of soil. He certainly, in his estimate of food supply, omitted the consideration of the vast areas, at that time, of virgin soil unoccupied in the Western Hemisphere. He no doubt based his calculations principally on the population of Great Britain, with its food producing capacity, which of course, independently of her commercial intercourse with other nations, would no doubt soon have proved to be correct. There were no railroads in those days by which rapid transportation of food from one country to another, where want or famine was threatened, could be effected in a very short time. He made his calculations on the natural increase of population, without inquiring into any other causes that might tend to check it aside from the want of food and some physical causes. He did not embrace in his calculations a high state of civilization as one of the factors that might arise to curtail or diminish increase of population. Most writers on populations have opposed the theory of Malthus, and conclude the want of sustenance will not necessarily retard its increase, but that many other elements will tend to prevent its density becoming so great as to be curtailed by want of food.

I will only allude to a few authors on the subject. Mr. Charles Morris* denies the Malthus doctrine that populations increase in geometrical ratio, while food increases only in arithmetical ratio. He names three elements that may and do govern the increase or decrease of population independent of bread limits. These are physical, mental, and physiological causes. The first come from without, such as wars, famine, and pestilence. The second consists in the means a man's mind is able to call into action that tend to diminish or prevent the increase of population. He may determine not to marry, or if he does, to marry a wo-

man advanced in life, or after the age of menopause, or if he marries young and does not want children, use means to prevent conception. The third, or physiological causes, may consist of any mental or physiological effort made in the various pursuits of life. Brain-workers are much less liable to have large families than muscle-workers. It will be noticed that great scientists, statesmen, and orators, as a rule, have few children. The conditions of high life, luxurious living, etc., have already been alluded to. All these causes are in contravention to the theory of Malthus as to the solution of the problem of population in regard to its density being limited by food supply.

Dr. Allen* reviews, in a few words, the theories of several authors on the subject. Malthus' work was in opposition to the views of Condorcet and Godwine, his contemporaries. Doubleday, 1840, contended that whenever there was danger of an individual or species retrograding, a corresponding effort of nature was made to increase its fecundity in order to preserve it. Herbert Spencer, 1852, introduced a "new theory on population." "He maintained that an antagonism existed between individualism and reproduction; that matter in its lower forms possesses a stronger power of increase than in its higher forms; that the capacity of reproduction in animals is in an inverse ratio to their individualism; that the ability to maintain individual life, and that of multiplication vary in the same manner also, and this ability is measured by the development of the nervous system."

Fourier with some other French writers are about all that charge a high state of civilization with being a cause in diminishing the birth-rate of a people. But Fourier regarded the present state of civilization as false, which, no doubt, to a great extent is true, but that in time we will have a true civilization; one which will not only prevent decrease of population, but be productive of true happiness and prosperity; that man's existence on the earth will be 80,000 years; that populations will be dense, and during the middle ages of this period will arrive at a

very high degree of civilization and happiness.

Dr. Allen takes a different view from most authors on the subject of the law of increase or propagation. He says: "In the very nature of things, the law governing increase must be inherent in the body, must be incorporated into its very existence, that universality and unchangeableness must characterize such a law;" then asks, "What is the briefest definition that can be given of this law?" He says: "It consists in the perfectionism of structure and harmony of function, or, in other words, that every organ in the body should be perfect in its structure, and that each should perform its legitimate function in harmony with all others." He contends that the nearest approach to this perfect standard favors the greatest capacity for increase or reproduction; and in proportion to failure in reaching that standard will be the ratio of decrease in offspring. He gives various causes which tend to this decrease, such as brain work of an active character, constitutions where either the brain and nervous system or the lymphatic temperament predominate, which generally results from high states of culture, refinement, etc. He illustrates his view by referring to different classes of people and different conditions of life.

Dr. Billings* denies the correctness of the Malthusian doctrine, except when applied to animals and savage life. He says: "Whether in the future a systematic attempt to maintain an equilibrium between subsistence and population will become a practical problem of national policy, is at present a purely theoretical speculation, for it is very easy to show, as has been done by Mr. Atkinson, that the means of subsistence at present at our command can easily be quadrupled, as the increase of the population occurs to both require and produce such increase."

The late census of the French nation has shown such close limits between the birth- and death-rate that the attention of the authorities is attracted to the matter. The Assembly, with a view to promote the increase of population, have authorized a premium for

*Laws of Population, N. E. Med. Monthly, 1886.

* Cartwright Lectures, page 22.

large families of children, and a tax on bachelors.

This interest on the part of the government reminds us of the days of the great Emperor, when, being asked by one of the most cultured ladies of France, who, in his estimation, was the greatest woman in the Empire? replied, "The woman who had the largest family of children." The lady in question was Madam DeStael, perhaps the most intellectual woman in the nation. She wished to elicit a compliment from the greatest man in Europe, but unfortunately, although married, she had no children, while the Emperor wanted soldiers.

I was lately informed by a gentleman who spent some time in Paris years ago, and who is conversant with the French language, that it was a common thing among the middle and upper classes when making marriage contracts to stipulate how many children the wife is to have—the number being as limited as the husband will agree to. This bargain is usually made between the girl's parents or guardian and the prospective husband, and as a rule the greater the dower on the part of the parent the fewer must be the number of children.

I have said nothing in regard to Darwin's theory, that a struggle for existence is maintained continually among all species, both man and animals; not on account of deficient food supply, but of superiority and inferiority of individuals. This includes the doctrine of natural selection and the survival of the fittest. In other words, those that are not fit to propagate and improve the species perish or die out. But every day we observe contradictions of this theory. We frequently see feeble and diseased parents procreate their species, and this process many times goes on from generation to generation.

There does not seem to be any great exertions made in this country for existence, either for the want of food or on account of inferiority of organization. The greatest struggle we experience is among politicians.

As before remarked, my object in writing this paper is to show that were it not for the results, in a sanitary point of view, of the efforts of medical men the populations of some of the so-called advanced civilized States would

soon be on the wane and become extinct within a few centuries. This fact I have shown to be already in process of fulfillment in Massachusetts as it regards her native inhabitants; that their death-rate exceeds their birth-rate, notwithstanding the science of sanitation, the practical benefit of which they are enjoying. As before remarked, were it not for immigration she would now be on the decline. And were it not for the benefits arising from sanitary science doubtless the same might be said of most of the New England States. Their birth- and death-rate nearly averaged those of Massachusetts. The question may arise, if sanitation has done so much to prevent disease and prolong life where it is observed, why is not the longevity of the people of Massachusetts greater than it is? As before remarked, the customs and habits of fashionable life tend to diminish off-spring and shorten longevity, and if it was not for sanitation, as it respects their environment, they would be in as sad a condition, as far as long life is concerned, as a tribe of savages who observe no hygienic conditions, and soon die out. On account of their mode of life and nomadic character their increase by birth-rate is low, which, added to the non-observance of the laws of health, they soon become extinct. It might be asked what have the medical profession done to prolong life? This question properly answered would require some prolixity. At the time Malthus promulgated his theory that the density of population would be limited in accordance with food supply, he was not aware that the science of medicine would step in to help upset his theory by lengthening life. In fact a century ago but little had been done with that end in view. To be sure Sir Christopher Wren had, by his sagacious skill in superintending the rebuilding of London after the great fire in 1667, arrested the plague as far as that city was concerned. Two years before that fire London lost 73,000 inhabitants by that epidemic disease. It has not visited London since. This was the result of proper reconstruction of streets, sewerage, and ventilation of houses. But we have no record of any other great advance in preventive medicine until the time of the great Jenner, who discovered vac-

cine a hundred years ago. The practical use of this discovery has saved millions of lives. Since then the various means employed to prevent disease and prolong life have resulted in increasing the longevity of man from twenty-eight to over thirty-five years. And it might be said, if the profession had the power granted them to institute measures and have them legally enforced to suppress all avoidable causes of disease, perhaps the average life of man would be double what it is now, and the time allotted to man would be verified. A great many things might be named as avoidable causes of disease, but the two principal causes that result so disastrously to life, and which might be avoided, are alcoholism and syphilis. But as long as politicians rule the country we can have but little hope of curtailing, to any great extent, the baleful influence of the use of spirituous liquors as a beverage, either in a moral or sanitary sense. As it regards syphilis, by the united action of the profession, I think some legal regulations might be effected to measurably suppress the disease.

The number of deaths resulting from these causes (alcoholism and syphilis), no doubt, will overreach 100,000 annually in this country alone. We can learn but little from census reports in this particular, as but few cases, comparatively are returned in accordance with the cause of death. This is mainly due to deference for the feelings of family or friends. Then again, comparatively speaking, but few die directly from the effects of ardent spirits, but mostly indirectly; and whatever disease may directly produce death is the one reported, although alcoholism was the primary cause. It is estimated that over 65,000 die annually, directly or indirectly, from its use. Probably nine out of ten of the murders and homicides committed in the United States are done under the influence of alcohol. Then, in order to prevent this terrible human slaughter, entire suppression of its use as a beverage would have to be effected.

As to syphilis we have to examine the records of children's hospitals where that disease is treated in order to get a reliable statistics, and then, perhaps, we will not obtain more than half the mortality resulting from that disease,

as no doubt half the children of syphilitic parents are either still-born or die within a short period after birth, and are never taken to the hospitals for treatment. Then, again, it is one of the most prolific causes of abortion.

As to consumption, which destroys about 12 or 14 per cent of the human race, the present aspect as to curtailing its ravages seems to be somewhat gloomy, although many sanitary scientists entertain the utopian idea that the time is not far distant when we will be able to control its prevalence.

The grounds upon which this hypothesis is based is of course the use of antiseptics and disinfectants. This plan is in accordance with the view that consumption is a contagious disease, but so far, I believe, it has not been advised by our scientists to isolate the patients as it is in all other diseases of a contagious nature. This plan was tried in Naples and Portugal over a hundred years ago by enactment of laws on the part of the governments of those countries. Physicians were compelled to report all cases under a penalty of fine and even banishment for failure. The poor patients were sent to the hospital, and the director was bound, under penalty of going to the galleys, to set apart the clothing of the patient. His room was declared to be infected, and must be renovated. The law was similar to that governing the management of the pest. Even the enforcement of these severe laws had no ameliorating effect as far as diminishing the prevalence of the disease was concerned, and in time they were abolished. If the disease is really contagious, one might suppose, *a priori*, that such positive measures of isolation and renovation would soon have greatly reduced its prevalence and finally have stamped it out. But there is much doubt as to its contagious character, and this view is greatly strengthened by the reports of Brompton Hospital. If we take the population of the attendants of all kinds in that institution, and an equal number of the outside population, we will find the disease is not more frequent among those within than it is among those without, according to numbers. This may be due to cleanliness, but if the disease possessed any positive feature of contagiousness as applied to diseases in or-

dinary of that class, there should certainly, be more of it within the hospital than without, taking equal numbers of people. Since the theory of its etiology being due to a microbe has become prevalent, and consequently its contagious character more fully believed in, heredity is not regarded as a factor of any importance. I can not help dissenting from this view. I have been familiar with so many cases where consumption was a marked characteristic of the family, that I can not resist the conclusion that heredity played an active factor in its development. I have had under my observation and care many cases wherein they had no opportunity to contract the disease by contagion. Yet I believe the disease may be acquired independent of heredity influence, by exposure, by bad sanitary surroundings, by previous frequent attacks of pneumonia or bronchitis. But I believe if persons predisposed by heredity could be prevented from intermarrying, the disease might be greatly curtailed in its prevalence. But of course such legal restraint could hardly be operative among a free people, as it would be regarded as class sumptuary legislation.

No doubt the time is not far distant when many other means of preventing disease and preserving health will be in our power to put into practical use. Some advance has already been made in the prevention of epidemics. This consists mainly in many instances in the observation of sanitary laws; in a word, true cleanliness, both in person and premises. Very few epidemic diseases of a dangerous character, outside of the ordinary contagious diseases, prevail where strictly sanitary conditions are observed.

"A great requisite to health is the preservation of all the leading organs of the body in a condition of regular and proportionate activity; to allow none to become too languid and none too active. The result of this harmonious activity is a pleasing consciousness of existence, experienced when the mind is withdrawn from all exciting objects, and turned inward on its own feelings. A philosopher once remarked that he never considered himself to be in perfect health except when he was able to place his feet firmly on the turf, his hands

hanging carelessly by his sides, and his eyes wandering over space, and thus circumstanced to feel such agreeable sensations arising in his mere bodily frame that he could raise his mind to heaven and thank God that he was a living man."

WEST POINT, KY.

SOME RECENT CASES IN PELVIC AND ABDOMINAL SURGERY.*

BY L. S. M'MURTRY, M. D.

The following group of cases is reported to illustrate a variety of pathological conditions and operative measures in pelvic and abdominal surgery. All the cases occurred in the author's practice during the last three months, and have not hitherto been reported or published. In every instance possible I have here the pathological specimens illustrating the diseased conditions encountered in the operations, which I will submit for examination. With two exceptions the cases were all "late cases," submitting to operation only after so-called conservative methods of treatment had been exhausted.

CASE 1. Dermoid Ovarian Cyst: Ovariectomy: Recovery. Mrs. W. R. M., aged thirty-six, mother of three children; last labor in July, 1887; applied to me for treatment January 24th of the current year. She had spent the entire winter in bed, and had been under treatment for almost a year for uterine disease; suffered severely with pelvic pain, irritable bladder and rectum, and bearing-down discomfort.

A firm tumor occupied Douglas' space, encroaching upon bladder and rectum. The uterus was normal in size, movable, and anteverted. Dr. W. H. Bolling, of Louisville, had examined the patient some weeks previously, and gave the opinion that the growth was ovarian. I advised removal of the tumor by abdominal section. The operation was performed on February 1, 1890. Drs. Bolling, Ingram, and H. H. Grant being present. I here present the tumor, and will pass it around

* A paper read before the Kentucky State Medical Society May 11, 1890.

for inspection. You will see that it is a dermoid tumor of the ovary, containing teeth and hair. The patient gave a history of a severe attack of peritonitis, and hence extensive adhesions were encountered.

The cyst ruptured while I was separating it from the bladder, which necessitated irrigation of the peritoneum and drainage-tube. The patient made an easy and uninterrupted recovery. The highest temperature and pulse marked less than one hundred, and she did not require a dose of opium. The drainage-tube was removed on the third day. From the size and rotundity of the tumor, lying in Douglas' pouch, it will be seen how readily it could be mistaken for the displaced fundus of the uterus.

The bimanual touch would correct such an error. The removal of this tumor relieved all the distressing symptoms and quickly restored the patient to health and activity.

CASE 2. Fibroid Uterus; Hemorrhage; Removal of Appendages; Recovery. Mrs. J. M. B., aged thirty-one, married seven years, never conceived, for several years had suffered severely with pelvic pain, with irregular and profuse menstruation. During the past year the pain had grown more severe, and the protracted hemorrhage was telling plainly upon her general health. She was anemic, nervous, and easily exhausted. Opium was a necessity at every menstrual flow, and she was menaced with all the horrors of the morphia habit. The bimanual touch disclosed several fibroid tumors upon the peritoneal surface of the uterus; one on the anterior surface was quite large. Three years ago after the uterus was curetted she suffered a severe attack of peritonitis.

On February 4, 1890, I opened the abdomen and removed the uterine appendages. The uterus was a mass of sub-peritoneal and interstitial fibroid growth. The ovaries and tubes were disintegrated by long standing inflammation, as you can readily see from the specimen here. They were enveloped and tied down in a mass of organized exudate, the result of localized peritonitis. These bands of false membrane were constantly contracting, and the ever-recurring menstrual flow thickened and tightened them, intensifying her suf-

fering. The removal of the ovaries and fallopian tubes relieves the menstrual pain and congestion, arrests the exhausting hemorrhage, and will cause arrest and atrophy of the fibroid growths.

This lady made a rapid recovery from the operation. The hemorrhage following the enucleation of ovaries and tubes was such that a drainage-tube was required. It was removed on the third day. It is now three months since the operation, and the effect upon the general health is most gratifying. The hemorrhage and pain have not recurred, and her health and strength are restored. This operation is one of the most satisfactory in the entire field of pelvic surgery. It is now the universal testimony of those seeing much of pelvic surgery that with fibroid tumors of the uterus is invariably found diseased condition of the uterine appendages. Removal of the appendages arrests hemorrhage and also the growth of the tumors. The mortality from this operation in skilled hands is only two and a half per cent. In appropriate cases it yields brilliant results.

CASE 3. Fibroid Uterus; Copious Hemorrhage; Removal of Appendages; Recovery. This case is analogous to the preceding. Mrs. C. P. H., aged thirty-six; mother of three children; youngest child six years old. Has been an invalid for four years; conspicuous symptom, hemorrhage. The menstrual flow is copious, excessive, and irregular. Hemorrhage brought on at any time by walking, exertion of any kind, and emotional disturbance. Has been in bed the greater part of three years past. She states that in July of last year a physician administered ether and curetted the uterus. This operation was followed by such copious hemorrhage that the tampon was necessitated. An attack of peritonitis supervened.

Two fibroid tumors can be readily felt by placing the hand on the abdomen; the growths rise almost to the umbilicus; the uterus was nodular.

I opened the abdomen on March 13, 1890, and removed the uterine appendages. Dr. H. H. Grant administered ether, and Dr. Julia Ingram assisted me. Drs. T. P. Satterwhite, W. H. Wathen, and Ewing Marshall were present.

One ovary you will observe, in examining the specimen, is cystic, and the diseased condition of both tubes and ovaries is similar to that exhibited by the specimen just presented with the report of the preceding case. The patient made a prompt recovery after the operation, and the result of the operation is all that could be desired. The hemorrhage was promptly arrested; the fibroid growth shriveled perceptibly during the four weeks the patient remained in the hospital before returning to her home in the interior of the State. From a letter just received she writes that she is constantly improving in strength, and that she has resumed her domestic and social duties after four years of invalidism and suffering.

CASE 4. Gall Stones; Suppurating Gall-bladder; Cholecystotomy; Recovery. The following case is unique, and presents interesting points in diagnosis, pathology, and treatment:

Mrs. J. E. W., of Jeffersonville, Indiana, consulted me early in March, with the following history: She is twenty-four years of age, the mother of two children. For three years past she has suffered severely from paroxysms of biliary colic. During the past year the attacks have increased in frequency and severity. The paroxysms last from four to eight hours, and chloroform inhalation is required for relief.

The ingestion of a moderate meal, over exertion, or excitement are sure to bring on a paroxysm. Her dietary is limited to a few simple and soluble articles, and she habitually abstains from supper. Her normal weight is 136 pounds; she has run down to 104 pounds. She has never been jaundiced. She is pale and has the care-worn expression of pain. At my suggestion she ate supper on March 11th, and suffered a severe colic. Morphia failed to relieve her, and chloroform inhalation was required for her relief. A pyriform tumor could be outlined in the right hypochondrium, which I ventured to pronounce to be the gall-bladder. She was anxious for something to be done for permanent relief. At my request, Dr. J. A. Ouchterlony saw the patient with me, and concurred in the opinion that she was suffering from retained gall-stones.

This lady came to Sts. Mary and Elizabeth

Hospital, and after two weeks of rest and careful attention to her diet I did cholecystotomy. The operation was performed on April 22, 1890. Dr. Wm. Bailey administered ether, and Dr. Julia Ingram assisted me. Drs. J. A. Ouchterlony, Chas. Lucas, and Dr. Watkins, of Jeffersonville, were present. The incision was three inches and a half long, made directly over the gall-bladder in a vertical direction. After separating the adhesions by which the gall-bladder was attached to contiguous viscera, I delivered that viscus through the incision. It was quadruple the normal size, and the walls very much thickened. After careful sponge-packing to protect the peritoneum and contained organs beneath, I incised the gall-bladder at its fundus. About four ounces of mucopurulent fluid were evacuated and two large biliary calculi were removed. I here present the stones for your examination.

You will note that the large size of the stones made their exit through the duct impossible. After thoroughly evacuating the gall-bladder, I explored the duct with my finger and could find no stones lodged in the duct.

The introduction of a rubber drainage-tube, and stitching the incised gall-bladder to the edges of the incision in the abdominal wall, completed the operation. The tube ceased to discharge after ten days, and was removed. The opening gradually closed. No bile was discharged at any time, only clear mucus. The progress of the patient after the operation was easy and uninterrupted. From my daily record of her case I find that the pulse was never faster than 86, and her temperature did not exceed 99°.

A seidlitz powder was the only medicine prescribed. Dr. Simon Flexner made a microscopical examination of the fluid from the gall-bladder, and found it to contain cholesterin, pus-corpuscles, and debris. The result of the operation is all that could be desired. The patient is completely relieved of all her symptoms, eats heartily and of articles which heretofore were sure to bring on pain. She rapidly improved in nutrition, and at the end of five weeks after the operation returned home. From an examination of the large stones removed it is apparent that intestinal peristalsis stimu-

lated the gall-bladder to contraction, forcing the stones to engage in the duct which could not admit of their passage. The retention of secretions and irritation had begotten inflammation of the gall-bladder.

Evacuation of the gall bladder and removal of the stones did away with the mechanical and pathological causes of suffering and impaired functions. This operation has not been performed often in this country, and has been only recently brought to appreciative recognition. It was done by Marion Sims a few years before his death. He gave it the name of cholecystotomy, and brought it prominently before the profession. Tait and Thornton have done the operation repeatedly of late and with admirable results. Mr. Tait reports fifty-five cases with fifty-two recoveries. I had the privilege of witnessing the operation at Mr. Thornton's hands last year. It is one of the most brilliant achievements of modern abdominal surgery, and in skilled hands is safe and successful in the relief of a most painful and serious condition of disease.

CASE 5. Large Uterine Myoma; Supra-Vaginal Hysterectomy; Recovery. Mrs. M., aged forty-six, mother of three children, observed an enlargement of the abdomen about three years ago. It gradually increased, and gave no special trouble during the first year. It was recognized by the family physician as a fibroid tumor of the uterus, and it was hoped that the menopause would bring arrest of growth and atrophy of the tumor. The growth, however, persistently increased, and continued to grow even more rapidly after the menopause. I was called to see this lady on April 5, 1890. Her condition was most distressing to contemplate. The abdomen had the appearance of the full term of pregnancy. The tumor occupied the entire abdominal cavity. She was emaciated, suffering severely from pressure symptoms, and confined to bed. She was able to retain but little food, vomiting daily, with all the distress of pressure on bowel and bladder. The feet and legs were swollen. On April 22, 1890, I did supra-vaginal hysterectomy. Dr. Julia Ingram assisted me, and Drs. Wm. Bailey, Chas. Lucas, C. Skinner, F. W. Samuel, and Watkins were present. The

tumor was a soft myoma of the uterus, and had undergone cystic degeneration, giving distinct fluctuation. The abdominal incision was eleven inches in length; about two pints of ascitic fluid were discharged. Firm adhesions attached the surface of the tumor to parietes, omentum, and intestines. As separation progressed the denuded surfaces bled freely and necessitated sponge-packing. The tumor having been released from adhesions (the omentum was tied and cut away), was delivered through the long parietal incision. The broad ligaments were tied and divided down to a level with the internal os uteri, and the entire mass, including ovaries and fallopian tubes, was removed. The fallopian tubes were so large that when first seen I mistook them for the small intestines. Large venous sinuses coursed over the surface of the tumor. The pedicle was secured with Kœberle's *serrenacud* and fixed in the lower angle of the wound. The incision was closed with silk sutures, and the peritoneum carefully stitched around the pedicle.

The tumor weighed sixteen and a half pounds. It was a soft myoma. The so-called fibroid tumors of the uterus, or fibro-myomata, for clinical purposes must be divided into two distinct classes. The nodular fibroid is altogether different from the soft myoma found in this case. The latter grow more rapidly after the menopause, are soft and edematous, and the patient is rescued only by complete removal of the tumor, of which the uterus is the nucleus. This operation is one of no mean magnitude, and can not be executed upon an emaciated and exhausted patient without considerable shock. In this instance the shock was promptly relieved by filling the abdomen with hot water. The patient rallied promptly, and made an uninterrupted recovery. The wound healed throughout by first intention, and the *nude* patient came away on the eighteenth day. The patient returned from the hospital to her home in the city quite well at the end of five weeks.

CASE 6. Sarcoma of the Uterus; Total Vaginal Extirpation of the Uterus; Recovery. Mrs. H. W. S., aged fifty-eight years, was referred to me by her physician with the diagnosis of malignant disease of the uterus. The prominent symptom was hemorrhage. There was

no offensive odor, and but little pain. The cervix was hard, and examination by touch or speculum was followed by hemorrhage. I curetted the cervical mucous membrane and sent the scrapings to Dr. Simon Flexner for microscopical examination. He pronounced the growth malignant, the nature of which was spindle-cell sarcoma. The vagina and adjacent parts gave no evidence of infiltration by the morbid process, and vaginal hysterectomy was determined upon. The operation was done on May 2d, in the presence of Drs. George W. Griffiths, T. P. Satterwhite, Julia Ingram, Watkins, and Lucas. Dr. J. Ford Barbour administered ether. The broad ligaments were secured with Greig Smith's clamps, which were removed at the end of fifty-two hours.

The difficult point in the operation is the dissection beneath the bladder, great care being necessary to avoid injury to the ureters and bladder. The patient made a quick and uninterrupted recovery. The parts healed firmly. Her general nutrition is good, and she returned to her home at the end of five weeks in excellent health. In presenting the excised uterus for examination, I particularly ask attention to the extent of invasion of the organ by the disease. From the history and the symptoms in this case the malignant degeneration was in its incipency and apparently limited to the cervix. Yet an examination of this specimen shows that the entire length of the body of the uterus had been invaded by the disease. To have removed the cervix by the highest possible amputation could have done the patient no good. The only rational treatment of uterine cancer is total extirpation of the whole uterus. No matter if the cervix exhibits only limited infiltration, we can not assume that the body of the uterus is healthy.

Total extirpation is the only thorough and trustworthy operation, a fact demonstrated by the specimen I here present for your examination. The gratifying result in this case is due to the early recognition of the nature of the disease by the family physician, and the successful execution of the operation.

CASE 7. Acute Intestinal Obstruction; Abdominal Section; Recovery. I was called by Dr. J. A. Larrabee on May 8, 1890, to join him

in a case of intestinal obstruction. The patient, a male, aged forty, had for years had an inguinal hernia on the right side, and wore a truss. During the night he had been seized with pain and vomiting. Dr. Larrabee discovered the tumor and recognized the hernia, gave chloroform, and applied taxis. He succeeded in reducing the mass in part, but felt that the reduction was not complete. The patient was for a time relieved, but in the early morning vomiting recurred. When I saw him at 10 A. M. the belly was tender and tympanites was developing. The inguinal canal seemed clearer, but a boggy mass could be felt external to the inguinal ring, and seemed as if it were incorporated in the abdominal wall. The ejected matter from the stomach was the green serous vomit characteristic of peritonitis. The symptoms of obstruction were less urgent, the pulse was eighty, the vomiting had ceased, and we decided to await further symptoms. The patient had received a dose of morphia during the night. On the following morning Dr. Morgan Vance joined the consultation. The patient's condition was like this: slightly impressed with morphia; patient indifferent; tympanites slightly increased; vomiting had recurred in the early morning. The boggy mass on the right side, already described, remained the same; we believed it to be imprisoned omentum. The pulse was good, vomiting had again subsided, and, thinking the symptoms might be due to traction of retained omentum after reduction of the gut, we decided to wait a while longer before deciding upon interference. The patient referred all pain to the epigastrium.

During the night symptoms of obstruction were intensified, and on the following morning, the 10th inst., Dr. Vance again joined Dr. Larrabee and myself in consultation, and we decided to operate. Dr. Larrabee administered chloroform and Dr. Vance assisted me in the operation. An incision of three inches was made in the median line. The abdomen contained a quantity of serum, and other evidences of active peritonitis were apparent. The seat of obstruction was readily found. A loop of the ileum was imprisoned and strangulated in the femoral canal. By dilating the band en-

circling the gut at the femoral ring with my fingers, the strangulated gut was liberated. The gut was of a deep rosy hue, with good vitality.

Irrigation of the peritoneum brought away a great deal of lymph and debris. A glass drainage-tube was placed in the recto-vesical pouch, and discharged a quantity of lymph and bloody serum for two days. It was removed on the third day.

The patient was put to bed without shock, pulse 80° , and all the untoward symptoms rapidly disappeared. The bowels moved freely in response to an enema, and an uninterrupted convalescence was promptly inaugurated.

This case is a demonstration of the value of exploratory operation in intestinal obstruction, and a confirmation of the principle of early interference in such grave conditions, wherein expectancy and so-called conservatism invariably end fatally.

LOUISVILLE.

GOUT.*

BY C. J. RADEMAKER, M. D.

The nitrogenous compounds that are derivatives of decomposed nitrogenous matter found in the urine of healthy persons are urea, uric acid, ammonia, kreatin and coloring matter. A quantitative analysis of the urine reveals the fact that a healthy young man produces daily about thirty-three grams of urea, seven decigrams of ammonia, six decigrams of uric acid, seven decigrams of kreatin, and eleven decigrams of coloring matter. The relations of these bodies differ during different hours of the day. Directly after a meat diet the urine contains more uric acid, kreatin and coloring matter, and is poorer in urea and ammonia. Twelve hours afterward the urine becomes richer in urea and ammonia. But if the urine that is passed in twenty-four hours is collected, mixed, and examined, we find a constant relation existing between the urea and uric acid, and namely in the relation of one gram of uric acid to fifty-five grams of urea. Uric acid in its pure state is a white

crystalline powder, noted for its sparing solubility in water. One gram of uric acid requires fifteen liters of cold, but only two liters of hot water for solution. In alcohol uric acid is insoluble.

The chemical relation of uric acid is as yet not very clear. Its empirical formula is given as $C_5H_4N_4O_3$, and contains 33.3 per cent of nitrogen. By name it is called an acid, but its aqueous solution has no acid reaction to litmus. It combines with concentrated H_2SO_4 as well as metals to form salts. The salts of the alkaline metals are neutral and acid. In the neutral salts we have two atoms of alkali-metal with one molecule of acid; in the acid salts we have one atom of metal with one molecule of acid. The neutral alkaline salts are readily soluble, while the acid salts are but sparingly soluble in water. Uric acid is much more soluble in an aqueous solution of caustic potash or soda, or their carbonates, and also in a neutral solution of phosphate of soda, than in water. In these solutions urates of the metals are formed. Uric acid exists in the urine as urates, either neutral or acid salts. It is for this reason that a liter of urine contains more uric acid than a liter of distilled water will dissolve. One liter of urine can contain six decigrams of uric acid in solution. If to this a little hydrochloric acid is added, the uric acid will be precipitated, as chlorides of the metals are formed. In dilute urine no uric acid is precipitated if hydrochloric acid is added; why this is so has not been explained. Hydrochloric acid was formerly the adopted method for estimating uric acid in urine, but now the more accurate silver method is used. This method was first introduced by Camerrer. (*Zeit Schrift für Biol.*) He precipitates uric acid by means of a solution of ammoniated nitrate of silver. The process is as follows: 300 c. c. of urine is diluted to a specific gravity of 1.010; this is treated with 50 c. c. of magnesia mixture to precipitate the phosphates, and then filtered to 200 c. c. of the filtrate, 0.5 of $CaCO_3$ is added, and then treated with 5 c. c. of a three-per-cent solution of silver nitrate. The precipitate is thrown on a filter, washed, pressed, and rolled together and put in an iron combustion tube, and the nitrogen estimated by

*Read before the Medical Department of the National Life Insurance Company at the Metropolitan Hotel, New York.

volume, the temperature and barometer being reduced to normal temperature and pressure. From this the uric acid is calculated.

THEORIES OF GOUT.

It was supposed that gouty persons produce more uric acid than people not suffering with this disease, and that the nitrogenous matter was first converted into uric acid, and by further oxidation into urea. In other words, that the albuminous substances taken by gouty persons was not completely oxidized. As a proof of this theory, it was asserted that gout was only produced in people who lead an easy life, and who took a good deal of albuminous, fatty, and starchy food, and who consumed a great deal of alcohol. These last named substances are readily oxidized in the body. It was supposed that not sufficient oxygen entered the body to oxidize all these substances, hence the accumulation of uric acid. But this theory is antagonistic with all modern theories of the decomposition of matter in the body. According to Garrod, it is not the production of uric acid that produces gout, but that its elimination is not complete. He argues that the same quantity of uric acid is formed, but that it is accumulated because the kidneys are almost always diseased, which is the cause of its not being properly eliminated. But Garrod says nothing about the relation of urea and uric acid. As stated before, these relations are constant. Consequently, if a patient eliminates only sixteen grams of urea in a day, it is quite natural that he will only eliminate three decigrams of uric acid. This leads to the conclusion that too little albuminous matter has been decomposed. But if only three decigrams of uric acid and thirty-three grams of urea were eliminated during the day, we should conclude that too little was produced, or that it was not eliminated. Besides, Garrod's method for estimating uric acid by means of hydrochloric acid is not very accurate.

Erbstein is of the opinion that uric acid is formed in the muscles of gouty persons, while other people do not produce it, and that this is carried through the circulation and precipitated in the tissues. The fourth theory is, that as uric acid is but sparingly soluble, and that

gouty persons have not the proper solvents for it that healthy persons possess, consequently a precipitation of uric acid in the tissues. A chemical and microscopical examination of urine reveals nothing abnormal, only that the organic nitrogenous constituents are not of the normal quantity—hence we find the urine of gouty persons having a very low specific gravity (1.010). This condition of things is due (according to Garrod) to plugging up of the uriniferous tubules by urates. But suddenly the urine is passed in a very concentrated condition, of a high specific gravity, and the patient gets well almost as suddenly as the attack came on. At the same time there is almost an immediate precipitation from the urine of a free acid. To this acid, which is *not* uric acid, I contend that the attack of gout is due.

Normal urine has a specific gravity of 1.020 to 1.024, and an acid reaction to litmus paper. The reason of this acidity is due to the fact that the acids of urine are not completely neutralized by the alkaline metals and metals of the earths.

The hydrochloric and sulphuric acids are always saturated, but the uric and phosphoric acids are not. The phosphoric forms three varieties of salts, namely, acid, neutral, and basic.

The urine generally contains acid and neutral phosphates, and acid and neutral urates. If the urine contains much acid phosphates it is likely that the urate of soda will be decomposed by it, and a precipitation of uric acid takes place.

Persons suffering with gout, acute or chronic, have almost an immediate precipitation in the urine after passing it. If this precipitate is examined chemically it will be found to differ from uric acid in its ultimate composition. This acid is only found in the urine during an attack of gout, and always in a free or uncombined state, while the uric acid remains in the urine as a urate, and in solution. This acid was prepared in its pure state by the following process: The precipitate in urine was collected on a filter and washed with distilled water. It was then transferred to a beaker and neutralized with a dilute solution of caustic soda, and filtered through animal char-

coal. The filtrate was treated with pure dilute hydrochloric acid, the precipitated acid again washed with distilled water, re-dissolved in a solution of caustic soda, and again precipitated with pure dilute hydrochloric acid, washed and dried. This acid, prepared by the above process, is a white crystalline powder but sparingly soluble in water. Its aqueous solution has a decided acid reaction to litmus (which uric acid has not). Its formula from an ultimate analysis is $C_6H_8O_4N_4$, its molecular weight 200, and it contains 28.28 per cent of nitrogen.

A barium salt of this acid was prepared by dissolving the pure acid in a dilute solution of caustic soda, filtering the solution, evaporating and crystallizing. A solution of this salt was decomposed by a solution of chloride of barium. The precipitated barium salt was washed with distilled water, dried over sulphuric acid in a drying oven, and weighed. .0221 grams of substance left after incineration .0122 grams of $BaCO_3=40.87$ per cent of barium. The empirical formula of urate of barium, $C_5H_4N_4BaO_3=305$ requires 44.90 per cent of barium. The barium salt was calculated for



Ba	—	137	=	40.65	per cent	Barium.
C ₆	—	72	=	21.37	"	Carbon.
H ₈	—	8	=	2.37	"	Hyd'gen.
O ₄	—	64	=	19.00	"	Oxygen.
N ₄	—	56	=	16.61	"	Nitrogen.
		<u>337</u>		<u>100.00</u>		

The acid contains by calculation in one hundred parts :

C ₆	—	72	=	36.00	per cent	Carbon.
H ₈	—	8	=	4.00	"	Hyd'gen.
O ₄	—	64	=	32.00	"	Oxygen.
N ₄	—	56	=	28.00	"	Nitrogen.
		<u>200</u>		<u>100.00</u>		

Found, 0.3166 grams of acid gave 0.4183 grams of Co_2 = to 36 per cent of carbon, and 0.1223 grams of H_2O = to 4.25 per cent of hydrogen.

0.0438 milligrams of acid gave 10 c. c. of moist nitrogen, temperature $20^\circ C.$, barometer 729 m. m. = to .01239 milligrams of nitrogen = 28.28 per cent nitrogen.

SUMMARY.

Calculated.			Found.		
Carbon,	36.00	per cent.	36.00	per cent	C.
Hydrogen,	4.00	"	4.25	"	H.
Oxygen,	32.00	"			O.
Nitrogen,	28.00	"	28.28	"	N.

The connection between gout and this acid is the following: This acid being but sparingly soluble in warm water, it is, under certain conditions, such as a rapid change in temperature and exposure to cold, precipitated in the tissues. If this precipitation takes place in the muscular coat of the trachea and bronchus, we have asthmatic gout; if in the heart, we have cardialgia, with disturbances of the functions of this organ; if in the joints, we have arthritis. All these conditions produce inflammation of the parts in which the precipitation takes place, consequently the pain and fever, but as a rule no suppuration takes place. Why this acid in its uncombined state is precipitated in the tissues of some people and not in others is not known. What produces this acid in some people and not in others has never been discovered. But as gout is generally produced in people who eat a great deal of nitrogenous food, and drink wine and beer regularly, its production must be attributed to their mode of living. Under these conditions all the nitrogenous matter is not converted into urea, uric acid, kreatin, coloring matter, and ammonia. Hence the chemical changes into abnormal compounds, some of which are precipitated in the tissues.

TREATMENT.

The majority of physicians state that it is absolutely necessary to prescribe precisely the form, quantity and quality of food that a gouty person should eat. He should be forbidden to attend dinners, drink no wine or beer, eat but little nitrogenous food, and live principally on soups and vegetables. If this treatment is followed, I have no doubt that a gouty person will be free from all future attacks. But my opinion (and this opinion is founded upon individual experience) is that a gouty person should be fed like a healthy person. Gouty people have generally been reduced by fever, pain, insomnia, and loss of appetite, and left in a very enfeebled condition. If they are deprived of

meat, fat, and stimulants, there is more harm done than good. An excess of any of these substances should be forbidden, but if you limit them to a minimum quantity you are liable to have indigestion, a condition that gouty patients readily acquire when subjected to this treatment. The medicine from which I have derived the most benefit is a combination of colchicia, decandria, and solania combined with iodine.

If there is such a thing as a specific for a disease, this combination can be classed as such: Colchicia ($C_{17}H_{19}NO_5$) as is generally known, is extracted from the meadow saffron, *colchicum autumnale*, and has been used in gout since the days of Hippocrates. Iodine in the form of iodide of potassium has also been extolled for the cure of this disease. Decandria is a more modern alkaloid, being first isolated by me in 1889 from *phytolacca decandria* (Linne) or poke root. (See Medical Herald for April, 1889.) Decandria (C_3H_7N) molecular weight 57, is a volatile base, and is classed with the amines. Solania ($C_{42}H_{87}O_{16}N$) is obtained from *solanum dulcamara* or bittersweet. These alkaloids are neutralized with dilute hydriodic acid, and then salicylate of soda added, and the whole made into an elixir of proper strength. It is found in the market under the name of the "Solution of Triple Hydriodides, with Salicylate of Soda." These medicines are all known to the profession, but I claim originality for the combination. I have also used this combination in acute and chronic rheumatism with great success.

The only objection that I have found to this combination is that it produces iodism in people that are very sensitive to the use of iodine. The alkaline carbonates are only indicated when there is an acid condition of the stomach and bowels. It has never been proven that gouty people are deficient in alkali, consequently, if the alkaline carbonates are given they should be given in doses of about thirty grains daily, largely diluted with water. Given in this quantity and in this condition, they will not interfere with the action of the stomach. The mineral and vegetable acids should under all conditions be avoided, as they increase the liability of precipitating this acid

in the tissues. A proper diet should be prescribed for all gouty people. They should eat meat only once a day. Stimulants, if taken at all, must be used very moderately. This applies to both acute and chronic gout. In the chronic stage, as much exercise should be taken as the strength of the patient will admit, this being the best way to hasten absorption.

LOUISVILLE.

LAPAROTOMY FOR STRANGULATED HERNIA.*

BY W. L. RODMAN, M. D.

Demonstrator of Surgery in the University of Louisville.

Mr. Casey, a robust young man, twenty-one years of age, who was the subject of inguinal hernia—but did not wear a truss—was taken suddenly ill with strangulated hernia on Friday morning, March 21st. Drs. LaRue, Ewing, and Wooten, of Smith's Grove, Warren County, were called in. Putting patient under the influence of chloroform they succeeded, after manipulating the tumor for more than an hour, in causing its disappearance. Symptoms of strangulation continued, the patient vomiting fecal matter freely after the reduction of the hernia. Constipation was as obstinate as before, the bowels failing to act from purgatives of various kinds. He went on from bad to worse until Monday the 24th, when Dr. Wright, of Bowling Green, was added to the consultation. A diagnosis of intussusception was made and an immediate operation urged. The grandfather of the patient, Dr. Arnold, did not concur in the diagnosis, and insisted that the young man had "had colic." He refused to allow any operation. Monday night, when the case was "in extremis," and every one thought death would result before morning, Prof. D. W. Yandell was telegraphed to come at once, prepared to operate for intussusception. He was unable to leave the city and asked me to make the trip. I did so, reaching Smith's Grove at 5 A. M., Tuesday.

I found Drs. Arnold and Ewing with the case; they told me that he was much better—they thought he would die before midnight, but since then had rallied.

*Read before the Louisville Surgical Society, April 14, 1890. For discussion, see p. 412.

If he had "rallied" when I saw him, his condition before must have been extremely critical. I found him cold to the knees and above the elbows. His temperature was subnormal; his pulse about 150, felt more as if there was gas in the vessel than blood. It was like the flickering pulse of severe hemorrhage. He was restless and tossing about the bed, although he had been given morphine hypodermically several times during the night. He was, as he had been for five days, vomiting fecal matter. His brain was singularly clear. He realized his great peril, and begged me to operate upon him. I told him that his pulse was so very weak that I feared he would die under the anesthetic. He and his father appreciated this fact, but knowing that death was inevitable as things were going, insisted upon the operation. I will say here that I did not concur in the diagnosis of intussusception, but at once expressed the opinion that the strangulation had never been reduced. *The tumor was gone*, but I was positive that the hernia had either been reduced *en masse* or that a complete had been converted into an incomplete hernia. The former seemed more likely for two reasons: First, the prolonged manipulation; second, the frequency of such an occurrence.

Consenting to operate after daylight if we could bring about some reaction, we set about doing every thing to accomplish this end. Fortunately I had tablets of digitalin with me; two $\frac{1}{200}$ grain tablets were used an hour apart, whisky was given by the syringe, and hot bottles applied all around him. By a little after seven o'clock his condition had improved somewhat; the pulse dropped from 150 to 140, and I fancied that he looked better. We got every thing ready for an operation so as to keep patient under the anesthetic as short a time as possible. I was afraid to give chloroform on account of his weak heart, so gave the A. C. E. mixture. It acted very nicely indeed, and I was so well satisfied with it that I shall use it frequently hereafter.

I did a median laparotomy, making an opening not more than two and a half inches long. I found the gut—a portion of the ileum—within and firmly adherent to the internal ab-

dominal ring. Gentle traction did not relieve the gut from its imprisonment. Knowing that the gut must be softened by five days' strangulation, I feared to make much traction lest I should tear it. So I put the index finger of the right hand into the inguinal canal from without to push the gut up into the cavity, at the same time making gentle traction from within the cavity. In this way the difficulty was at once overcome and the strangulation reduced. The gut was found in better condition than I expected. I thought resection might be necessary before inspecting it. There was general peritonitis. The operation was completed very promptly, in twenty minutes.

Pulse was better under the anesthetic than it had been. Patient came from under it very easily. Vomiting ceased, and up to the time I left, one o'clock—five hours after the operation—all symptoms of strangulation were relieved. The pulse became frequent and feeble, just as it had been for three days, soon after the effect of the anesthetic passed away, otherwise he seemed doing admirably. His temperature which had been subnormal reached the normal, his skin was warm, and every thing save the pulse indicated improvement.

Dr. LaRue wrote me that his pulse never improved. He died thirty hours after the operation of heart failure.

It is to be regretted that the laparotomy could not have been done forty-eight or seventy-two hours earlier; had such been the case he would almost certainly have recovered. There was so little accumulation in the cavity that a drainage tube was unnecessary.

This is the second case I have seen wherein symptoms of strangulation persisted after the hernia had been apparently reduced. In the other case, as in this, the tumor was reduced only after prolonged taxis. The lesson taught by such a case is that taxis should be employed gently and for only a reasonable time, say fifteen or twenty minutes; this failing, herniotomy should be done at once. Violent and prolonged taxis may cause inflammation, rupture of the intestine, reduction of hernia *en masse* with continuance of all the symptoms of strangulation.

TWO CASES OF ECTOPIC GESTATION CURED BY ABDOMINAL SECTION.*

BY A. C. BERNAYS, A. M., M. D., M. R. C. S., ENG.

Professor of Anatomy and Clinical Surgery at the St. Louis College of Physicians and Surgeons; Consulting Surgeon to the City and Female Hospitals, etc.

CASE 1. Mrs. K., a young married woman, called to consult me on December 22, 1889, saying that she had been having her menstruation for about ten days and that she was still flowing. She had been married two years and four months, had always been regular in her menstruation up to November, 1889, during which month she missed her menses, and considered herself pregnant. She had menstruated in October, the flow lasting from October 1st to 4th, about four days, as it had always done before. On December 15th she was suddenly stricken down by a most severe colicky pain in the lower abdomen. The pain was so severe that she was compelled to lie down on her bed, and became almost unconscious for a short time. Soon after this occurrence she noticed that she was bleeding slightly all the time and was having sharp, shooting pains lasting an hour or two at a time across the lower abdomen, which sometimes made her "double up," as she expressed it. Being very busy during my consultation hours, I made no examination and ordered no medicine, but told the patient that most likely she was having or going to have a miscarriage, and that she must go home and take to her bed. I advised her, if the pains became worse, to send for her family physician; but that, if she did not miscarry and the flow stopped, she must call again in a week. I may add that the patient was a beautiful, strong, well-built woman of excellent family history, and twenty-eight years old.

She returned in one week, the flow as well as the pains continuing unchanged. I put her off for another week, when she returned again in the same condition, and I again failed to make an examination, for purely external reasons. Finally, about a week later, on January 15, 1890, the symptoms being the same, the flow of blood continuing steadily, the colicky pains keeping up, the patient

looking anemic and having some fever ($101\frac{1}{2}^{\circ}$), I made an examination. I found a small stream of blood trickling from the os uteri; the os was softened and slightly patulous, and crowded toward the left. The right parametrium was filled up with a tumor as large as a small fist. The probe passed into the uterus a distance of three inches and one half, causing a slight increase of the hemorrhage. On this evidence I made a diagnosis of tubal pregnancy of the right side of about twelve or fourteen weeks' duration, and advised an immediate laparotomy, which was readily consented to. On the evening previous to the day set for the operation I requested Drs. A. S. Barnes and Y. H. Bond to examine the patient with me, which they did, both concurring in the diagnosis after a very careful examination. At this examination I introduced a fine trocar into the tumor, with the result of finding some very dark blood in the rather hard tumor, a few drops of which escaped through the canula. I think this measure was justifiable because I had fully determined to perform laparotomy the next morning. The patient had been prepared in the usual manner, and with the assistance of Drs. Y. H. Bond, George A. Krebs, and George W. Cale, I performed the operation at the patient's home, No. 1213 Carroll St., in St. Louis, at 10 o'clock on January 18, 1890.

Dr. H. C. Harkins administered chloroform, and after the abdomen had been opened in the linea alba, the section being just large enough to admit the hand, the diagnosis of tubal gestation of the right side could be at once confirmed. On withdrawing the hand, it was followed by a gush of dark blood, which had evidently been in the pelvis for some time, and mixed with it were some small pieces of brown, partially organized shreds and coagula. The tumor was quickly freed from its neighboring organs by separating the adhesions which loosely connected it with these organs and with the pelvic walls. The broad ligament was adherent to the rectum and also to the bladder. The tumor was now rolled out of the abdomen, a clamp applied to the pedicle about three quarters of an inch from the uterine ostium of the tube, and a ligature applied, after which the broad ligament, distended tube, and ovary

*Read at the May Meeting of the Kentucky State Medical Society, 1890.

were cut off. No toilet of the cavity was attempted, as it seemed unnecessary. The cavity was closed in the usual manner. Duration of the operation, twenty-seven minutes. Patient made a very easy recovery, was up and about in three weeks, enjoying perfect health.

The examination of the specimen shows an exquisite hemato-salpinx due to a tubal pregnancy, the blood having escaped from the villi of the chorion at the point where the placenta was developing. The tube is distended, so that it is two and a half inches in its largest diameter and three and a half inches long. The surface of the tube is covered by shred-like adhesions, although in some places the peritoneal covering is seen in a normal condition. The muscular coat of the tube is much hypertrophied, averaging an eighth of an inch in thickness. The embryo was not found, but traces of it were seen in the shape of translucent gelatinous tissue, lying within the clot, which filled the tube.

This is the first case of laparotomy in ectopic gestation successfully done in the State of Missouri.

CASE 2. On March 12, 1890, at one o'clock, Dr. Kleinecke called at my office and requested my advice in a case which presented most alarming symptoms. He stated that he had been called at eight o'clock of the same day to see Mrs. Laura S., a young married woman twenty-five years of age, the mother of a pair of twins nearly three years old. She had been married four years, always healthy, of excellent family history, and indeed a magnificently built woman. Her menses had always been regular and painless. She had menstruated last from December 23 to 27, 1889; missed her menstruation in January and February, 1890. From March 1st to 8th she noticed that she was losing blood rather freely, and on March 6th she passed some shreds, most likely parts of the decidua. Since she was suffering no pain she consulted no physician, and in her innocence or simplicity did nothing at all, but attended to her usual duties. On the 8th of March the bleeding ceased. On March 11th at about 5 o'clock in the afternoon she was lifting a heavy vessel containing some coal, when she suddenly fell to the floor and fainted away.

Dr. A. Schlosstein was called. He saw her at 5:30, about half an hour after the collapse; made an examination; found the pulse 80, temperature 100°; the collapse had passed over, but patient had severe pain in the epigastric region and some nausea. The doctor thought that it was either a case of retro-uterine hematocoele, incipient peritonitis, or rupture of an ectopic gestation. When Dr. Kleinecke, her regular physician, saw her the following morning he found her looking very pale, pulse 100, abdomen tender, slightly distended. When he saw her at noon, pulse 140, patient falling into syncope at short intervals, and as white as a sheet. Dr. Kleinecke consulted me at this time, and after hearing him we left my office and drove as fast as good horses could carry us to the patient's residence. I took with me my emergency case of instruments, my assistant, Dr. Geo. A. Krebs and Dr. R. Etavard. On our way we picked up Dr. A. Schlosstein. When we arrived the patient was in a deep syncope; pulse weak, 144; abdomen moderately distended; a vaginal examination revealed nothing which threw any light on the case, beyond the fact that the uterus was somewhat enlarged, and that there was a very slight bloody discharge from the os. The position of the uterus was normal, but pressure upon it aroused the patient from her syncope and seemed to be painful. The diagnosis was intra-abdominal hemorrhage caused by a ruptured ectopic pregnancy.

The only room in the house that seemed to me warm enough for the performance of abdominal section was the kitchen. It was fortunately a light, commodious room, and was rapidly turned into an operating room. I think this procedure did not occupy more than twelve minutes.

Dr. Schlosstein administered the chloroform, and Drs. Kleinecke and Krebs assisted me, while Dr. Etavard attended to the sponges. The patient's husband was kept busy heating some water. The condition of the patient was so precarious that I made the incision through the very fat abdominal parietes down to the peritoneum, at a single sweep, and after making a small cut into the peritoneum, tore this membrane so as to be able to introduce my hand. A

gush of blood such as I have never before seen poured out of the abdominal cavity. The amount was variously estimated at from four pints to eight pints, and I rather think the latter guess is nearer the truth than the former. I introduced my hand and caught the uterus and felt the blood pouring from a lacerated mass connected with the right fallopian tube. My fingers at once checked the hemorrhage, and after pulling out the adnexa I applied a clamp to the right horn of the uterus. The tubal expansion in this case was so close to the uterus that the clamp actually compressed the horn of the uterus; in fact, I think the case was one of interstitial pregnancy. The rent in the sac was intra-peritoneal. The ligature included uterine tissue, while the tube was cut off at its uterine connection. The outer three fourths of the tube were not at all concerned in the formation of the sac. The distension involved only the first inch of the tube and a portion of the uterus. After the ruptured sac, tube, and ovary were removed, the uterus was dropped back into the cavity. Some more very large blood clots were removed with the hand. A careful toilet was not attempted; indeed I am sure that a good deal of liquid blood and coagula were left in the cavity. The incision was closed by a single line of sutures. The duration of the operation was nineteen minutes. The following table gives the further progress of the case:

Date.	Pulse.	Temp.
March 12.....	134	101°
" 13.....	128	101°
" 14.....	128	101°
" 15.....	128	101°
" 16.....	126	101°
" 17.....	126	101°
" 18.....	120	100°
" 19.....	120	101°
" 20.....	112	101°
" 26.....	100	100°
April 15.....	90	99.4°
" 25.....	84	98.8°

Liquid diet and rectal alimentation were employed during the first ten days. Stitches were removed on sixth day; first intention of entire wound.

Patient was able to get up and attend to her usual duties six weeks after the operation. This is a case wherein the patient's life was undoubtedly saved by prompt surgical interference.

The pregnancy must have been between seven and nine weeks' duration. In many respects the case is an instructive one, and I believe it is perhaps the first case of ruptured interstitial gestation which was saved by abdominal section.

The embryo was very small, and lay in the amnion, but was considerably damaged by handling the clot which filled the chorion, or rather the space between the amnion and chorion. I should judge that the sac before it was ruptured was not larger than a guinea egg. The embryo is not larger than one centimeter in its longest diameter.

St. Louis, Mo.

Societies.

LOUISVILLE SURGICAL SOCIETY.

Stated Meeting, April 14, 1890, D. W. Yandell, M. D., President, in the chair.

Dr. Yandell reported the following case:

A young man, twenty-one years of age, came to him with a swelling over the antrum. The case was of over twelve years' standing. Two years ago a doctor had made an ineffectual attempt at its removal. A cut had been made through the skin and a portion of the growth was pulled away with much accompanying hemorrhage. The wound in the face soon healed, but the tumor continued to grow. The tumor grew so rapidly after the operation as to suggest the theory of malignancy. The nose and upper jaw were pushed to one side. Diagnosis, tumor of the antrum. On consultation an exploratory incision was agreed upon. This being made a mass looking like liver was found. An attempt to remove the mass was accompanied with very considerable hemorrhage; so great, indeed, was the flow of blood as to suggest the existence of aneurism. This, however, was excluded by the absence of any thing resembling a sac. The mass was removed as far as practicable, but the deformity of the face continues. Examination of the neoplasm shows it to be angioma.

Dr. John A. Ouchterlony (present by invitation) asked the opinion of the Fellows relative to the following case:

A child, male, one year old, has as yet not made, nor can it be induced to make, any ef-

fort at walking. The child is well developed, but the bones are disproportionately small. Reflex excitability seems to be below par. The testicles have descended. The prepuce shows a very small orifice. Will circumcision be of any avail?

Answers: Dr. A. M. Vance would circumcise for the sake of cleanliness. Dr. E. R. Palmer would split the prepuce and turn it backward. Dr. W. O. Roberts would circumcise. Dr. Turner Anderson would look to the state of the child's bowels. He once saw a child who would not walk at the time when children ought to walk. There was a tendency to constipation, and great pain in evacuation whenever the bowels were suffered to go long unmoved. Examination revealed a long fissure which the doctor divulsed under chloroform. The result was that the child soon after began to use its feet in learning to walk. He does not as a rule circumcise children with narrow prepuces. He divulses the prepuce and strips it back. This usually is sufficient for breaking up adhesion and getting rid of the smegma. He thinks splitting unnecessary in most cases. Dr. Roberts believes that retraction of the prepuce after divulsion will sometimes fail to relieve the phimosis. The prepuce returns and the orifice contracts to its original small caliber. Dr. Vance has no trouble of this kind when the mother can be made to keep up the retraction till dilation is made permanent.

Dr. W. L. Rodman believes in doing circumcision so soon as phimosis seems likely to make trouble. Circumcise at once. There is nothing to be gained by temporizing or by surgical subterfuge. Dr. Yandell says circumcise first, then examine the bowels. Full circumcision in his hands has always given results better than any obtainable by other devices. Splitting has been almost always unsatisfactory. Simple retraction in his practice has resulted in eczema and thickening of the prepuce in a number of cases. Unlike Sayer, he has not found many infantile troubles to be due to close prepuce. The speaker referred to a case in point. The child would not walk at the proper time. He had close prepuce, and was circumcised. He is much older now and walks

badly. The doctor believes the circumcision did no good in this case. He would have all boys circumcised as a sanitary measure. He believes the Jewish rite to be good; good for all. The habit of masturbation is far less likely to be acquired by the circumcised boy. Tight fitting pants start the erotic tendency in the majority of cases. He always advises the mother against tight fitting pants on little fellows. After circumcision this cause is less likely to be operative.

Dr. W. L. Rodman read the essay of the evening. Subject, Laparotomy for Hernia. (See page 408.)

DISCUSSION.

Question — Dr. Roberts: Was there any serum in the cavity?

Answer — Dr. Rodman: There was no serum, and as I had to leave the case I used no drainage-tube. This being a case of long standing, the symptoms being urgent, and as nothing could be felt in the canal, I considered a median laparotomy indicated.

Dr. Yandell, referring to the action of the anesthetic in the case said: Bryant long ago called attention to the fact that chloroform pure generally brings the pulse up in cases where depression is marked. If the anesthetic does not bring the pulse up, the surgeon had better not operate. The speaker believes that the improvement in the pulse in this case was due to the chloroform rather than to the mixture.

Dr. A. M. Cartledge: The case would seem to be one of interstitial hernia. If it had been otherwise the condition could have been detected after apparent reduction. Dr. Rodman found a considerable tumefaction; but nothing in the canal. He would have proceeded as did the essayist except that he would have given chloroform rather than a mixture of anesthetics. He once saw a patient who died from strangulation after apparent reduction of the hernia. The *post-mortem* showed a state of things similar to that described by Dr. Rodman. In all such cases he would favor early operative interference. Prolonged taxis exhausts the patient. There is more danger in delay than in radical operative interference. The speaker recalled a case in which, after

failing to reduce the hernia by gentle taxis for three or four hours, he operated and found clots in the sac, with evidence of bruising.

Dr. John G. Cecil said that if the hernia were strangulated the patient should have been in a worse condition than that described by the essayist. There should have been sloughing if strangulation were complete. Possibly a single knuckle only of the intestine was incarcerated. I can not conceive how, under the circumstances, strangulation could have been complete. Dr. E. R. Palmer considers fifteen minutes long enough for taxis. Dr. Vance would waste no time in operating when symptoms of strangulation were evident. Often when the gut has a bad appearance an application of towels wrung out in hot water will result in rapid improvement in the condition of things. Sometimes in attempted reduction a twist is made in the bowel obstructing it. Perhaps in the case narrated circulation was better than function.

Dr. Yandell said that during the last twenty years he had not waited more than twelve hours when symptoms of strangulation were apparent in hernia. If after very gentle taxis the hernia fails to undergo reduction, he operates at once. The operation is by no means formidable, and it is singularly successful. Dr. Roberts' success in these cases bears striking testimony to the truth of this statement.

Dr. Roberts asked if the phenomenon of hematemesis had been observed by any of the Fellows in strangulated hernia. He had seen it in one case. The patient was not a drinking man, nor was he gouty. In this case there was a small tumor in the left inguinal region, which disappeared when the bowels moved.

Dr. Rodman, closing the discussion, said: I have seen chloroform bring up the pulse in shock after railroad injury. I believe it was the ether in the A. C. E. mixture rather than the chloroform that brought up the pulse in the case reported. I supposed, from the gut having been strangulated for five days, that resection would be necessary, but its condition was singularly good, which was due to the fact that the function of the gut had been interfered with rather than its circulation.

E. R. PALMER, M. D.,

Secretary.

Reviews and Bibliography.

Syllabus of the Obstetric Lectures in the Medical Department of the University of Pennsylvania. By RICHARD C. NORRIS, A. M., M. D., Demonstrator of Obstetrics in the University of Pennsylvania. 154 pp. Price, \$2.00. Philadelphia: W. B. Saunders. London: Henry Renshaw. 1890.

This syllabus has been prepared to meet the difficulty of accurate note-taking encountered by most students, and is designed to secure for the student a logical and consecutive outline of the lectures on obstetrics delivered in the University of Pennsylvania, and to aid in classifying the knowledge acquired in the lecture room. It is divided into two parts; the first relating to lectures to the graduating class, and the second to those delivered to the combined classes. The important points are few, if any, that are not touched upon in a suggestive way, and the treatment of the subject evidences the completeness of the course; and if the tone is somewhat dogmatic it grows out of the fact that such a style is perhaps the most effective in teaching students.

On disputed points the views adopted seem uniformly to be those at present approved; especially marked is the influence of the teachings of Tait on ectopic pregnancy.

In explanation of the great frequency of cephalic presentations, the author offers "the assumption that this position taken by the fetus affords the greatest degree of comfort and the best opportunity for growth and development." He does not tell us why it does not occupy that position in more than half the cases in the earlier months of gestation, nor how, never having occupied the position head downward before, it ascertains that it affords the greatest degree of comfort and the best opportunity for growth and development, nor how it makes the change when it gains this information. Surely, if the efforts of the fetus are tentative it is just as apt to go from a good position to an ill one as from an ill to a good one.

His explanation of the cause of rotation is as simple as erroneous, viz: Whatever portion of the fetus first strikes the floor of the pelvis,

whether it *encounters this structure behind or in front of the median transverse line, will be directed forward under the symphysis pubis*. In breech presentations where one leg is brought down, no matter which, the opposite hip turns posteriorly and without any reference to which first touches the pelvic floor. And how can it be said that in cases of after-turning head, and in anterior right or left oblique, the occiput is the first to touch the pelvic floor. And even if this point is conceded, will some of the advocates of this view explain the definite physical principles involved in the movements in question?

D. T. S.

The Pulse. By W. H. BROADBENT, M. D. Illustrated with fifty sphygmographic tracings; pp. 312. Price, \$1.75. Philadelphia: Lea Brothers & Company.

In 1887 the task of delivering the Croonian Lectures before the Royal College of Physicians of London fell to the lot of Dr. W. H. Broadbent. He chose for his theme "The Pulse," and the lectures at once took their place as the ablest, the most successful, and most philosophical contributions to the subject in the English language. With some amplifications and additions—with the addition, in particular, of a chapter on the sounds of the heart, without which the full significance of the variations in the character of the pulse can not be appreciated—these lectures are now furnished us in the form of this little volume. As might have been expected from its author, who is eminent alike as a physician, a physiologist, and a philosopher, the work stands pre-eminent in its department, and as such we commend it most cordially.

D. T. S.

Essentials of Gynecology, Arranged in the form of Questions and Answers. By EDWIN B. CRAGEN, M. D. With fifty-eight illustrations; pp. 192. Price, cloth, \$1.00; interleaved for taking notes, \$1.25. (No. 10 of Saunders' Question-Compends). Philadelphia: W. B. Saunders. London: Henry Renshaw. 1890.

This work, like the others of its class, is not intended to afford a thorough study of the subject of which it treats, but merely to furnish a

means of review and a summary of more extensive reading. While the author states that it is prepared especially for students of medicine, there are few physicians who may not peruse its pages with profit. As a nucleus for association, the suggestive questions and answers can not fail to recall and fix more firmly in the memory the results of previous study, that might often become dim indeed without the advantage of some such invigorating process.

D. T. S.

Anesthetics, Ancient and Modern: Their Physiological Action, Therapeutic Use, and Mode of Administration, together with an Historical Resume of the Introduction of Modern Anesthetics—Nitrous Oxide, Ether, Chloroform, and Cocaine—and also an Account of the more Celebrated Anesthetics in use from the Earliest Times to the Discovery of Nitrous Oxide. By George Foy, F. R. C. S.; 175 pages. London: Bailliere, Tindall & Cox. 1889.

The title of this work is sufficiently full to obviate the necessity of an extended review. It gives quite an interesting history of the search after means of allaying pain and producing sleep, that has gone on from the earliest times, as also the exaggerated claims to discoveries in that line now and again made during the earlier ages.

The author also gives the result of the latest and most careful investigations as to the best mode of administering anesthetics, and the conditions favoring their administration.

D. T. S.

The Pathological, Clinical History, and Diagnosis of Affections of the Mediastinum, other than those of the Heart and Aorta, with tables giving the Clinical History of Five Hundred and Twenty Cases. Being an Essay to which was awarded the Fothergillian Medal by the Medical Society of London, March, 1888. By HOBART EMORY HARE, of the University of Pennsylvania. 156 pp. Price, \$12.00. Philadelphia: P. Blakiston & Son. 1889.

Some seasons since, while a discussion was in progress in one of the Louisville medical societies on the steady encroachments of the specialist on the domain of the general practitioner,

a member, distinguished alike for learning, poetic attainments, and wit, made the point that the diseases of the vermiform appendix and the anterior mediastinum would shortly be all that would be left to the general practitioner.

Judging from this work of Dr. Hare, even a part of that field is threatened, and it is not certain that the general practitioner will long have left to him even the appendix.

Dr. Hare here collects all cases found reported in medical literature of disease of the mediastinum, other than those of the heart and aorta, a large portion of them being diseases of a malignant nature. The work is chiefly valuable as supplying an aid in the differential diagnosis of some very obscure maladies.

D. T. S.

Essentials of Diseases of the Skin, Including the Syphilodermata. Arranged in the form of Questions and Answers, prepared especially for Students in Medicine. By Henry W. Stelwagon, M.D. Ph. D. With seventy-four illustrations. 270 pages. Price \$1; cloth. Interleaved for taking notes, \$1.25. Philadelphia: W. B. Saunders; London: Henry Renshaw. 1890. (Saunders's Question Compend, No. 11.)

This volume is largely the product of a remodeling and simplification of the various articles contributed by the author to Pepper's System of Medicine, Buck's Reference Handbook of the Medical Sciences, and Keating's Cyclopedia of the Diseases of Children. All the leading authorities in this department of medicine have likewise been consulted. The entire work is marked by a most gratifying clearness, and the classification and nomenclature show an increasing recognition of the truth that species are divisions made on artificial lines for convenience of understanding and study, and that most forms blend into each other in such a way that, refine as we will, there must always be many cases of doubtful diagnosis.

D. T. S.

A FIRST-CLASS LOCATION for an unmarried regular physician. Address John Clark, jr., Hillsboro, Fleming County, Ky.

Correspondence.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Dr. Dujardin-Beaumetz has recently published a note in the *Bulletin de Thérapeutique* on the importance of diet in urinary insufficiency. According to the author, two principles should form the basis on which is built the dietary for patients suffering not only from urinary insufficiency, as in albuminuric cases, but in all cases where the kidneys are diseased or where they do not act properly. (1) To prevent, as far as possible, the formation of poisonous products or toxins in the system. (2) To reduce to a minimum the toxins which may exist in the food. Hence all forms of meat should be forbidden, especially game, which is apt to be tainted, for it is an error to suppose that the various sorts of meat do not contain ptomaines. For the same reason, mollusca, crustacea, the codfish, etc., should be interdicted. As to aliments which may be allowed, the first place should be given to eggs well cooked, as they have no influence upon the production of albuminuria. Omelettes and starchy matters, as of potatoes and peas, also green vegetables, well cooked. For beverages, milk is especially recommended, and if any wine be taken, it should be white wine diluted with water. If any meat at all is allowed, it should be beef *a la mode*, chickens with rice, or fresh pork. From time to time a light purge may be given, and by rigidly adhering to the principles concerning diet above laid down, life may be prolonged for some time.

In a recent chemical lecture, Dr. Reclus, a young surgeon, brought out historically the many applications of cocaine in practice. Formerly cocaine was exclusively employed in mechanical cases, particularly in those accompanied with more or less severe pain. Its use became gradually extended to surgery, and its application was introduced in the treatment of the diseases of the eye. A few drops of a solution of cocaine inserted between the eyelids produced complete insensibility of all the parts exterior of the eye, so that the mem-

branes, which in their normal condition are extremely sensitive, may be touched with impunity. This precious quality of cocaine was at first utilized in simple cases, such as in the extraction of a foreign body passed under the lid or remaining fixed in the cornea—an operation in appearance simple, but which is not always easily practiced, owing to the great sensibility of the conjunctiva. The results obtained by the use of cocaine were so satisfactory that it was gradually extended to more serious operations on the eye, and it is now preferred by oculists to any other anesthetic. The following are the advantages of this valuable substance: The effect of cocaine is entirely localized to the part where the surgeon wishes to operate. Moreover, cocaine has no influence on the mental faculties of the patient, as have ether and chloroform, and these substances produce local insensibility only after having produced general insensibility, associated with a loss of consciousness on the part of the patient. This is an enormous advantage in favor of cocaine, principally in all operations on the eye, where the aid of the patient is necessary to keep the part operated on in a state of absolute tranquility. In general surgery cocaine is less employed. Till now it has been used only for simple operations requiring but little time, and in which the skin and the tissues immediately below are implicated. Dr. Reclus, however, is trying to utilize cocaine in all operations where chloroform is considered altogether indispensable. Dr. Reclus has, with the aid of cocaine, performed some hundreds of operations, some of which were difficult and grave, such as strangulated hernia, incision, and washing out of a hydrarthrosis of the knee, removal of various tumors, etc. In all these cases he succeeded in producing a sufficient degree of insensibility by the injection of a few centigrams of cocaine in the neighborhood or on the part itself which is proposed to be operated on. Dr. Reclus cites a case in which the effect of the injection lasted one hour and a half without the patient manifesting any sign of suffering. This case would appear to be in evident contradiction with the general opinion which is entertained on the effect of cocaine, the duration of which is con-

sidered to be very short.* In order to prevent accidents from the use of cocaine, it must be remembered that, like the majority of alkaloids, cocaine is a powerful poison. After a long experience Dr. Reclus has come to the conclusion that seven or eight centigrams of cocaine may be prescribed for nearly all patients, and that this quantity is quite sufficient to produce the necessary degree of anesthesia. In more than one case he has employed a stronger dose, without remarking any extraordinary symptoms. The mortality due to the employment of this medicament, has been very small, and almost entirely resulting from other causes than those produced by the poisonous effects of the medicament itself. It appears, therefore, that cocaine is destined to take a high rank among the anesthetics in the daily practice of surgery. It will perhaps not dethrone those which have preceded it—ether and chloroform—but it will have the immense advantage over them in not affecting the consciousness of the patient. With cocaine there will be neither syncope nor the fear of sudden death, which often occur after the employment of chloroform. It will also permit the patient to take an active part in the operation, which may be of great utility to the surgeon. These two great advantages are so important that this new manner of producing insensibility will be favorably received by all surgeons in their practice.

Dr. Surmay writes, in the *Scalpel*, a note on the successive expulsion, in the space of twenty-four hours, of seven fibro-myomata of the uterus, under the influence of subcutaneous injections of ergotinine. The case was that of a woman forty-seven years of age, suffering since five years, and complaining of abdominal and other erratic pains. She had arrived at such a degree of weakness that the slightest thing brought on syncope. Every month, at the monthly periods, she was affected with profuse metrorrhagia. The lower extremities were edematous. After the proper examination she was prescribed absolute rest in the horizontal position during the metrorrhagia, and the employment of the subcutaneous injection of one milligram of ergotinine, increasing the dose of the medicament, after

a few days, to two milligrams per day, in two doses. Eight days after the commencement of this treatment the patient was seized with uterine pains, and expelled three tumors, each composed of a membranous portion and a fleshy portion, the latter being about one centimeter thick, about eight centimeters large, of soft consistence, and of a fibrous structure in appearance, and without odor. On examination per vagina a tumor was discovered in the uterine neck analogous to the above, which was extracted. A fourth and a fifth were also extracted, a sixth was expelled spontaneously, and a seventh was extracted the following day. The health of the patient was completely re-established, and menstruation became normal.

PARIS, May, 1890.

Abstracts and Selections.

ENTERO-MALARIAL FEVER.—In the Marine Hospital Bureau's Abstract of Sanitary Reports for April 11th we find the following special report by Dr. J. J. Kinyoun:

During the past year a careful search has been made in the majority of malarial and enteric fevers occurring at the Marine Hospital, New York, for the purpose of establishing the presence of the *Plasmodium malarie* in the blood and of the bacillus of Eberth in the spleen or intestinal canal.

The majority of malarial cases (over one hundred) were from one locality, viz., Virginia. They came from schooners engaged in the pine-wood trade between this port and Richmond. According to statements made by the patients, in nearly every instance only sufficient water was taken aboard in New York to last until they reached the pine-wood section, when they were compelled to drink river water or that from stagnant pools. Such water was also taken aboard for the return trip, and on arrival it not infrequently happened that several cases of malarial fever had developed.

The same statement will apply to many other vessels plying between New York and the more southerly ports, it being found that malarial infection becomes more frequent on those vessels whose sailors are obliged to go ashore and drink the water of the locality than in those that carry sufficient water to last them for the round trip. This fact alone suggests that almost if not all cases of malarial fevers are contracted by means of drinking-water.

Connected with this series of cases several

others of mixed infection have been encountered—a combination of malarial and enteric fevers, presenting clinically some deviations from the general course of either disease, and deemed of sufficient importance to record.

No difficulty has been encountered in establishing the source and time of malarial infection, but with regard to the enteric infection the difficulty has been great. Generally, however, the history was to the effect that the patient had remained ashore for some time previous to sailing to the malarial districts.

This combination of these diseases has presented two sets of symptoms, dividing the cases into two groups:

1. Cases in which the symptoms of malarial fever predominate, making the enteric lesion.
2. Cases in which the symptoms of enteric fever are most prominent.

In the first group (two cases) at the onset of the attack, the patients presented clinically all the symptoms of malarial fever, remittent, giving a clear history of infection, the attack being characterized by a chill followed by fever and remissions, constipation and irritable stomach, etc., this chain of symptoms completely masking the graver trouble, so that suspicions were not aroused as to the true character of the malady until the patients were under observation for four or five days. On admission the blood of the patients was examined for the malarial organism, which being found in abundance, the cases were put on appropriate treatment.

A brief synopsis of the symptoms of one case will serve for both:

H. M., aged twenty-three, was taken sick two days before admission, the attack commencing with a chill followed by fever, marked by a remission. On the day of his admission he had chilly sensations, then a rise in temperature, followed later by remission. A careful physical examination revealed nothing abnormal except a slight tenderness of the epigastric region and a considerable enlargement of the spleen. The bowels were constipated. A microscopical examination of the blood was made, and a large number of the *Plasmodia malarie* were found free both in the serum and within the blood corpuscle. This established the diagnosis of malarial fever of the remittent type.

On the fifth day after admission there appeared on his abdomen several suspicious looking spots suggestive of enteric complications. On the day following he had slight epistaxis, a tendency to diarrhea, and tenderness in the right iliac fossa. At this juncture a bacteriological examination was made of the feces, and after several trials a bacillus answering to

the description of that described by Eberth was isolated from the stools. An examination of the blood at this time demonstrated the presence of the malarial parasite, but in greatly diminished numbers, being confined to the corpuscle. During the next week the enteric symptoms became so marked that without any microscopical examination there could be no doubt concerning the enteric fever. At this time the remissions had ceased and the temperature curve was characteristic.

In the second case (first group) the symptoms were not so pronounced as in the first, but it did not differ from it on the whole. The *Plasmodium malarie* was found in the blood in abundance, and later the typhoid bacillus was isolated from the stools.

In the second group of cases (three in number) the enteric symptoms were well marked, giving a clear history of the disease. The patients had just returned from the South, where malaria was rife. The history gave the prodromal period, lassitude, etc., followed by diarrhea, epistaxis, and tympanites, and in one case slight hemorrhage.

As a matter of routine the blood was examined for the parasite, which was found confined to the corpuscle, not free in the blood serum.

A bacteriological examination was made in each case, and the bacillus of enteric fever isolated, thus establishing the co existence of both factors in the disease.

In one of these cases, during the third week of the attack, when convalescence appeared to have been established, the temperature being normal and the appetite returned, he had a sudden elevation of temperature that rose to 39° and lasted about four hours. The cause of this was attributed to some dietary indiscretion, a not infrequent mishap during convalescence from enteric fever. In twenty-four hours after the first attack he had another similar in all respects, which suggested that the probable cause was malarial. The blood was again examined, and the *Plasmodium* found to be present. A return to anti-periodic treatment for a few days, and then the case went on to speedy convalescence.

The other cases of this group terminated fatally, one by peritonitis following perforation, and the other by pneumonia. The combination of the two causes appears to have produced a more adynamic form than has been observed in other cases with like symptoms occurring here during the past two years.

Calling attention to the history of these cases is for the purpose of demonstrating that there is a combination of the two diseases, producing two distinct sets of symptoms, and that it is difficult, if not next to impossible, to dem-

onstrate it without recourse to both microscopical and bacteriological examination, notwithstanding the statement made by an eminent scientist that enteric fever can be differentiated from malarial infection by examination of the blood.

This class of cases without doubt gave rise to the fallacy that malarial fevers not infrequently terminate in typhoid, this opinion being held largely by the medical profession in malarial districts.

My observations on the blood of malarial fever cases have not been attended with any difficulty. Drawing the blood from the fingertips usually sufficed; in but few instances was it necessary to draw blood from the spleen.

In making examinations of the feces for the bacillus of Eberth failures outnumber the successes, owing to the fact of the enormous number of other bacteria present.

To make any deduction as to the duration of this form of disease will require more cases than I have cited, this preliminary note being offered for the purpose of inviting the attention and co-operation of other observers, and to elicit their views upon the points in question.

The conclusions arrived at may be summed up as—

1. Malarial and enteric fevers are not antagonistic to each other.

2. A differential diagnosis between the two diseases is sometimes impossible.

3. There exists a mixed form of infection which can be diagnosed by means of a bacteriological and microscopical examination.

New York Medical Journal.

REMARKABLE FECUNDITY—I was called to see Mrs. E. T. Page, January 10, 1890, about 4 o'clock A. M.; found her in labor and at full time, although she assured me that her "time" was six weeks ahead. At 8 o'clock A. M. I delivered her of a girl baby; I found there were triplets, and so informed her. At 11 A. M. I delivered her of the second girl, after having rectified presentation, which was singular, face, hands and feet, all presented, I placed in proper position, and practised "version." This child was "still-born," and after considerable effort by artificial respiration it breathed and came around "all right." The third girl was born at 11:40 A. M. This was the smallest one of the four. In attempting to take away placenta, to my astonishment I found the feet of another child. At 1 P. M. this one was born; the head of this child got firmly impacted at lower strait, and it was with a great deal of difficulty and much patient effort that it was finally disengaged; it was blocked by a mass of placenta and cords. The

first child had its own placenta; the second and third had their placenta; the fourth had also a placenta. They weighed at birth in the aggregate nineteen and a half pounds without clothing; first weighed six pounds; second, five pounds; third, four and a half pounds; fourth, four pounds. In the country, and "backwoods" at that, it was impossible to procure a "wet nurse," so with the little help we could control, and feeding the babies on "Reed & Carnrick's Infant Food," they thrived well. From using all the foods on the market, I long since found that the above food possessed some qualities that I failed to find in the others. Mrs. Page is a blonde, about thirty-six years old, has given birth to fourteen children, twins three times before this; one pair by her first husband. She has been married to Page three years, and has had eight children in that time.

Page is an Englishman, small, dark hair, age twenty-six, weighs about one hundred and fifteen pounds. There was quite an amusing incident occurred when I informed him that his wife would give birth to four children; he fell across the bed by his wife's side, threw his heels away up in the air, clasped his legs with both hands, and with a long wail of despair, cried, "Lord God, Doctor! what shall I do?"

They are in St. Joseph, Mo., now, having contracted with Mr. Uffner, of New York, to travel and exhibit themselves in Denver, St. Joseph, Omaha, and Nebraska City, then on to Boston, Mass., where they will spend the summer.

The birth of quadruplets is not so remarkable; but that they should live and thrive as these have done, is. In about 375,000 births there are quadruplets, and it is a remarkable fact that they always die. Will some of my brother M. D.'s give us their experience with quadruplets?—*Dr. J. De Leon, Dietetic Gazette.*

THYMOL DENTIFRICE.—The following formula is given by the Chemist and Druggist:

Precipitated chalk.....	15 oz.
Soap, powdered	1 oz.
Saccharin	10 grs.
Thymol	15 grs.
Camphor.....	30 grs.
Vanillin.....	5 grs.
Oil of rose.....	6 drops.

Rub the camphor and thymol together in a mortar, and warm gently so as to render the mixture liquid; then add the chalk in small portions at a time, reserving about one ounce; next add the other ingredients, the perfumes being first separately rubbed, with the remainder of the chalk.

VIOLET MOUTH WATER.—The *Seifenfabrikant* gives the following (Druggists' Circular):

Tincture of benzoin.....	7 parts.
Tincture of rhatany.....	30 "
Tincture of myrrh.....	60 "
Rose water.....	250 "
Tincture of orris root.....	500 "
Alcohol.....	250 "

TREPHING FOR OLD HEMIPLEGIA AND HEADACHE.—White applied the trephine in a case of this character. As it was thought that there was partial destruction of the cortical motor area on the right side, the trephine was applied over the middle of the fissure of Rolando. The bone proved three fourths of an inch thick, the dura was thickened, and the ascending frontal and parietal convolutions wasted. The thickened bone and dura were removed. Great improvement followed; but one fit and one headache were reported in seventeen months, and the leg has regained much power, though the hand remains the same.—*Medical Press and Circular.*

FISSURE OF THE NIPPLES.—The following will be found a valuable application in fissure of the nipples. It allays pain and promotes rapid healing:

Saloli.....	5j;
Etheris	5j;
Cocaini hydrochlor.....	gr. ij;
Collodii	5v. M.

TREATMENT OF ACNE.—The following treatment for acne has given good results: The paste given below should first be spread on the skin to the thickness of the blade of a knife, and rubbed off in a quarter of an hour, after which the skin should be dusted with tale (Medical and Surgical Reporter):

Napthol.....	5 ijss;
Sulph. precip	5 jss;
Sanolini.....	} āā
Sapon virid. }	
	5 vj.

M. et fiat pasta.

DEATH FROM FRIGHT.—An extraordinary case of death from fright is reported from Rangoon. It appears that a young Eurasian lad was crossing the road, when the rumbling of the wheels of a mail car frightened him, and he dropped down lifeless, the cause of death being syncope.

THE Cincinnati Lancet-Clinic pitches into the Tenth Congress vigorously because the medical profession west of the Alleghanies is not represented on the American Committee.

The American Practitioner and News

"NEC TENUI PENNĀ."

Vol. IX. SATURDAY, JUNE 21, 1890. No. 13.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

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THE ACTION OF STROPHANTHUS.

The British Medical Journal of the 14th inst. calls attention to some recent interesting studies upon the action of strophanthus, made by Dr. Bucquoy.

Under the sphygmograph he finds that strophanthus gives a characteristic tracing. The ascent of the curve reaches a higher level than normal, while the line of descent falls more abruptly. In short the characters of the collapsing or aortic regurgitant pulse are reproduced.

These observations were made on all varieties of valvular disease, and on a combination of these lesions. The effects of the drug were also tried on a case of fibroid kidney with arterial degeneration; also on a case of emphysema with "fatigued" heart, and on a case of "tachycardia" in which the hurried action was not dependent on valvular disease. Dr. Bucquoy has submitted to full scientific study only fourteen cases, but has witnessed incidentally the action of the drug in several hundred.

The practical lessons to be drawn from his studies are as follows:

"The indication for strophanthus is in every case ventricular incompetence.

"The increased force of the ventricular

systole caused by the drug is accompanied by a diminution in the frequency of the pulse, and by an attempt at regulation, but in many cases the pulse remained irregular.

"Strophanthus action is best shown in cases of aortic disease, and for the reason that an increased ventricular beat must become more manifest when the whole force of the stroke issues through the aortic opening than when, through mitral incompetence, only part of this stroke reaches the pulse; moreover the dilatation and hypertrophy of the heart in aortic disease being greater than in mitral disease, the former condition is better adapted to show increased force of action."

The doctor holds that strophanthus does not cause contraction of the arterioles. In cardiac failure he asserts that the drug has the advantage of rapidity of effect, of sustained action, and of tolerance. Its action is held to be less permanent than that of digitalis.

The above observations are of especial interest in view of the fact that they go far to confirm clinical experience, which is that strophanthus is competent to produce the desired therapeutic effect in many cases which do not tolerate digitalis.

We have been taught to beware of digitalis in cases of aortic disease; but in view of the ignorant indiscrimination with which it is given in any and all cases of heart trouble, the drug can not be as potent for harm as the older therapeutists would have us to believe. If, however, it be a matter of scientific demonstration that digitalis acts therapeutically in mitral disease, while strophanthus acts likewise in aortic disease, and that where one fails to act, or acts harmfully, the other acts beneficially, the therapeutics of cardiac disease are materially advanced and happily simplified.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

After the lapse of some ten or twelve years this society again honors Louisville by making it its place of meeting.

A communication just received from the Chairman of the Committee of Arrangements,

Dr. I. N. Bloom, states that some four or five hundred delegates are likely to be the guests of the Louisville physicians on this occasion, and that measures looking to the successful manipulation of so large a meeting, and the proper entertainment of so many visitors, are being rapidly put into shape.

The Chairman pertinently suggests that the subscriptions of our city physicians must be liberal if the reputation of the city in the matter of being "careful to entertain strangers" be maintained. This appeal is not a work of supererogation, since the money to meet such expenses never comes till somebody sets to work in earnest to raise it. That this will be done, and that the delegates will receive a welcome that out Kentucky's Kentucky, need not be said in the year of grace 1890.

Notes and Queries.

VETERANS OF THE CIVIL WAR.—As a part of the census of the people to be taken during the month of June, special provision has been made by Congress for ascertaining the names of surviving soldiers, sailors, and marines who were mustered into the service of the United States during the war of the rebellion, and of the widows of soldiers, sailors, and marines who have died. In connection with this special census of veterans the organization or vessel in which they served, the term of service in each case, and present residence, will be taken by the census enumerators. In the case of widows, information regarding the service of their deceased husbands is also required.

The importance of accurate statements concerning the military record of each participant in the late war should not be underestimated. It should be the duty, moreover, of every veteran soldier or sailor to see that the enumerator is placed in possession of the necessary information concerning his own service. If he can not be at home when the enumerator calls, he should leave a proper memorandum in the hands of his wife or other member of his household, so that the work of the census may not be delayed, and also that there may be no doubt as to the accuracy of the statements concerning

his service which may be given to the census enumerator. That there may be no question as to the points to be covered by this memorandum, it may be well to state that the special inquiries to be made concerning veterans of the civil war include the name, the company, and the regiment or vessel in which they served, their late rank, the dates of enlistment and discharge, the length of service in years, months, and days, and their present post-office address. Where a soldier or sailor re-enlisted or served in more than one organization or vessel he should be very careful to give the term of service in each instance, and to cover each enlistment. In giving the organization care should be taken to distinguish the arm of the service, as infantry, cavalry, artillery, etc., and if a person served under an assumed name, his statement should be made to cover both the name under which he served and the true name by which he is now known.

Veterans of the war generally will recognize and appreciate the value of this special census to them, and they should aid the census enumerators in getting true statements in every way possible. Without their co-operation correct results can not be reached. This personal appeal is made to them, therefore, in the hope that their attention may be specially directed to the importance of this work and the necessary information may be promptly supplied to the census enumerator when he calls some time during the month of June.

THE EARLIEST MARRIAGEABLE AGE OF JAPANESE WOMEN.—In *Sei-I-Kwai* is given the result of an investigation of the above subject. The average age at which menstruation first appears is found to be fourteen years and eight months. The growth of the woman in height ceases at the age of eighteen years, the average then being 148 centimeters. The growth ceases in the average at seventeen years. Consequently, the earliest marriageable age is from fourteen years and eight months to seventeen years, for women. For men, it is placed approximately at one year later. The growth of males ceases at the age of twenty-two years, when the average is 160.03 centimeters.

THE ELECTRIC EPISCOP.—At the German Congress of Internal Medicine, recently held in Vienna, Professor Stricker gave demonstrations with the electric episcop, invented by Herr Reiner, a Vienna medical student. This is an apparatus which makes it possible, by projecting objects moderately magnified on a gypsum plate, to show large objects, as, for instance, anatomical specimens of the cerebrum, etc., as well as experiments on animals carried out on a table, quite distinctly to an audience of four hundred persons. Professor Stricker showed the pulsating heart of a dog, and its changes under the influence of asphyxial blood. He also showed the human brain, and the movements of the intestines of a dog under irritation of the vagus. Professor Stricker also gave some interesting demonstrations with his electric microscope. He showed that by recent modifications of the instrument it was possible, by intense illumination, to attain even a magnifying power of 11,000 linears, and in this way to show, most distinctly, even bacteria to a large audience.—*Medical Record*.

PNEUMONIC FEVER IN THE AGED.—In a paper entitled Pneumonic Fever in the Aged, Wells refers to the following points:

1. The initial chill is absent in one fourth of the cases.
2. Pain is almost always present.
3. Expectoration may be scanty or absent; raised with difficulty; often non-characteristic.
4. Heart rate and arterial tension vary widely.
5. Physical signs are modified variously by senile changes. Crepitus is often elusive, heard on deep inspiration, with moist râles. Aegophony often replaces bronchophony.
6. Dizziness and frontal headache are frequent.
7. The tendency to prostration exists from the first.
8. The death-rate ranges from sixty to seventy-five per cent.—*Times and Register*.

DEATH OF THE ELEPHANT MAN.—The British Medical Journal announces the death of John Merrick, who was well known in England as the "elephant man." This name was given

him on account of a proboscis-like projection of his nose and lips, together with the peculiar shape of his deformed forehead. His disease was not elephantiasis, but a complication of congenital hypertrophy of some parts of the skeleton with pachydermatocele and papilloma of the skin. The deformity increased as he grew older, and the head became so large and heavy that when he lay down the head tended to fall back and produce a sense of suffocation. He was found dead in his bed in the London Hospital, and it was believed that the heavy skull had fallen backward while he slept and had dislocated his neck. Strangely, the hospital committee refused to have an autopsy made. The man had been exhibited several times before the London Pathological Society by Mr. Treves.—*Medical Record*.

UNDER date of April 2d, an account appeared in a daily paper of a very remarkable girl in Alabama, who awoke to the full enjoyment of life in the spring, bloomed through the summer, and sank into a torpor in the fall; the winter being spent in a hibernating state. On its face, this resembles a case of circular insanity of the melancholic type. A letter from the leading physician of the town, Dr. R. M. Hill, Mt. Meigs, states that no such person lives in the vicinity, nor ever did.—*Times and Register*.

[To us it looks more like a circular lie of the daily pressomaniac type.]

DR. NICHOLAS SENN and Dr. Christian Fenger have been elected regular Professors of Surgery in the Chicago Polyclinic. In addition to clinical work, they will present a special course in abdominal surgery twice yearly.

THE JOHNS HOPKINS UNIVERSITY, in Baltimore, celebrated its fourteenth anniversary February 22. The public exercises were held in the Mount Vernon Place Methodist Episcopal Church. Acting President Remsen presided, and made an address.

Two fatalities from chloroform occurred the same day (February 15th), one at Thomastown, Mich., the other at Dubuque, Iowa.

THE SHEPPARD ASYLUM.—Thirty-three years ago Mr. Sheppard, of Baltimore, died, and left the sum of \$560,000 for the purpose of building an insane asylum. Only the interest of the money could be used, however, and the institution has been slowly building ever since. It is now announced that it is nearly finished, and as a result of the delay the trustees find that they have still a productive investment of \$583,637.61, and buildings worth \$881,262.27. The Sheppard Asylum will, therefore, when completed, be one of the richest institutions of the kind in the country.—*Medical Record*.

A BALTIMORE boy is said to have suffered a unique accident. While drinking coffee from a flask his tongue was drawn into the flask by suction, and becoming fast, swelled, requiring the services of a physician to release it. That boy certainly had a pretty strong breath.

THE vacancy among the Queen's Physicians in Ordinary, caused by the death of Sir Wm. Gull, is to be filled by the appointment of Dr. R. D. Powell, the senior of the three Physicians Extraordinary.

SPECIAL NOTICES.

SEXUAL DEBILITY.—Gordon G. Jones, F. R. C. S., Edin., etc., Surgeon to the Hospital for Urinary Diseases, Soho, W., says, in the Medical Reprint (London England): "Probably the most frequent, and at the same time the most intractable cases which present themselves before a specialist in genito-urinary diseases, are those of 'sexual debility,' and this, again, is most commonly exhibited in the forms of sexual impotence and nocturnal emissions. Both forms are usually the result of excess, but it is no uncommon thing to find a married man, with no trace of previous pernicious history, and of present temperate habits, complaining of oncoming sexual inability. These are of all cases the most unsatisfactory, owing to the serious mental depression which almost invariably accompanies them and which occasionally culminates in suicidal mania. In all these cases much may be done by improving the patient's general condition, which is usually below par, by attention to hygienic surroundings and by electropathic treatment. It is all important, however, that we should have the assistance of a really reliable drug, but up to the present our efforts to procure such have not been over successful. Lately, however, Messrs. Eli Lilly & Co., of Indianapolis, have introduced a pill composed of extract of damiana, in combination with phos-

phorus and nux vomica, which has produced, in my practice, more satisfactory results than I have obtained from other remedies." The author reports five cases in which this combination of drugs gave most satisfactory results.

HYSTERIONICA BAYLAHUEN.—Parke, Davis & Co. announce that they have obtained genuine supplies of this promising plant and are prepared to furnish samples to physicians of a fluid extract for further trial.

This plant, which is a native of Chili, has been brought forward in the February 28th number of the *Bulletin General Therapeutique*, by Dr. Baille, and also before him by Carvallo, of Valparaiso, as a remedy of very considerable value in gastro-intestinal troubles, such as dysentery, colitis, and flatulency from intestinal dyspepsia.

The conclusions reached by Baille as to the drug are as follows, after having studied it in each portion of the body seriatim: "It is an excellent remedy for diarrhea, and acts very well in dysentery of the acute and chronic type, and bids fair to replace the balsams in the treatment of maladies of the respiratory passages.

"In genito-urinary troubles hysteronica is of great value, favorably modifying the secretion of urine and diminishing the bad odors. It can also be used in colloidion as a dressing for ulcers, and seems under these circumstances to act very much like the tincture of benzoin."

THE THERAPEUTICS OF HEMOGLOBIN COMPOUND.—The predigestion of foods has done much for the dietary of invalids and convalescents from acute disease or with anemia and enfeebled digestion.

It must be admitted, however, that many cases require frequently in devitalizing diseases some efficient method of rapid nutrition, capable of ready absorption without taxing the digestive functions to combat the anemia.

This is furnished most naturally by the circulating medium itself, blood containing the elements of nutrition in assimilable form, and a preparation of bullock's blood entitled Hemoglobin Compound has been prepared which seems to meet the indications admirably.

Experiments with this preparation have been in progress by its author, Dr. F. E. Stewart, for ten years past, and Hemoglobin is now marketed by Parke, Davis & Co. is the result.

This preparation has many advantages as a nutrient stimulant, and samples of it and literature descriptive of its application will be furnished physicians on request.

VIRGIL McDAVITT, M. D., Quincy, Ill., says: I usually find Celerina to be a very agreeable and acceptable nerve tonic, quieting and calming nervous irritability and causing sleep oftentimes after spells of continued wakefulness, adapted to use in much the same cases as valerian, assafetida, etc., not a cure-all, but a valuable addition to our armamentarium in the treatment of a class of cases which are often most vexatious and trying to the physician and worrying to the patient. In these cases I have often prescribed it alone or combined with other remedies with much success.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., JULY 5, 1890

No. 1.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

PIONEER SURGERY IN KENTUCKY.*

BY DAVID W. YANDELL, M. D.

*Professor of Clinical Surgery in the University of Louisville, Ky.;
President of the American Surgical Association.*

Fellows of the Association: In the endeavor to chronicle the lives and achievements of Kentucky Pioneers in Surgery, I shall not attempt the resurrection of village Hampdens or mute inglorious Miltons. The men with whom I deal were men of deeds, not men of fruitless promise.

It may with truth be said that from Hippocrates to Gross few in our profession who have done enduring work have lacked biographers to do pay liberal tribute to their worth. In justice to the unremembered few, I turn back the records of medicine for a century, and put my finger upon two names that in the bustling march of science have been overlooked, while I try to set in fuller light two other names of workers in that day which have and will hold an exalted place in history. The worthies to whom these names belong were pioneers in civilization as well as in surgery. I shall introduce them in the order of their work.

1806. The earliest original surgical work of any magnitude done in Kentucky, by one of her own sons, was an amputation at the hip-joint. It proved to be the first operation of the kind in the United States. The undertaking was made necessary because of extensive fracture of the thigh with great laceration of

the soft parts. The subject was a mulatto boy, seventeen years of age, a slave of the monks of St. Joseph's College. The time was August, 1806; the place, Bardstown; the Surgeon, Dr. Walter Brashear; the assistants, Dr. Burr Harrison and Dr. John Goodtell; the result, a complete success. The operator divided his work into two stages. The first consisted in amputating the thigh through its middle third in the usual way, and in tying all bleeding vessels. The second consisted of a long incision on the outside of the limb, exposing the remainder of the bone, which, being freed from its muscular attachments, was then disarticulated at its socket.

Far-seeing as the eye of the frontiersman was, he could not have discerned that the procedure by which he executed the most formidable operation in surgery came so near perfection that it would successfully challenge improvement for more than fourscore years.

Hundreds of hips have since been amputated after some forty different methods; but that which he introduced has passed into general use, and (though now known under the name of Furneaux Jordan's) remains the simplest, the least dangerous, the best.

The first genuine hip-joint amputation executed on living parts was done by Kerr, of Northampton, England, 1774. The first done for shot wounds was by Larrey, in 1793. I feel safe in saying that Brashear had no knowledge of either of these operations. He therefore set about his work without help from precedent, placing his trust in himself, in the clearness of his own head, in the skill of his own hands, in the courage of his own heart. The result shows that he had not overestimated what was in him. But whether or not Brashear had ever heard or read a description of what had been accomplished in this direction

*The President's Address, delivered at the regular annual meeting of the American Surgical Association, Washington, D. C., May 13, 1890.

by surgeons elsewhere, the young Kentuckian was the first to amputate at the hip-joint in America, and the first to do the real thing successfully in the world.

Dr. Brashear seems to have set no high estimate on his achievement, and never published an account of the ease. Had he done so, the art of surgery would thereby have been much advanced, his own fame would have been made one of the precious heritages of his country, and, what is better, many valuable lives would have been saved.

Eighteen years after the Jesuit's slave had survived the loss of his limb, the report of the much eulogized ease of Dr. Mott appeared.

Dr. Brashear came of an old and wealthy Catholic family of Maryland. He was born in February, 1776. His father journeyed to Kentucky eight years later, and cleared a farm near Shepherdsville, in Bullitt County. Walter was his seventh son, and was therefore set apart for the medical profession.

When a youth he was enrolled in the literary department of Transylvania University, where it is said he ranked high as a scholar in Latin. At the age of twenty he began the study of medicine, in Lexington, with Dr. Frederick Ridgely, a very cultivated physician and popular man, who had won distinction in the medical staff of the Continental Army. After two years spent in this way, he rode on horseback to Philadelphia, and attended upon a course of lectures in the University of Pennsylvania. At this time Rush, Barton, and Physick were teachers in that venerable seat of learning. His was a restless nature, and after a year spent in Philadelphia he shipped to China as surgeon of a vessel. While among the Celestials he amputated a woman's breast, probably the first exploit of the kind by one from the antipodes. Unfortunately for science, he there learned the method used by the Chinese for clarifying ginseng, and thinking, on his return home, that he saw in this an easy way to wealth, he abandoned the profession in which he had exhibited such originality, judgment, and skill, and engaged in merchandising. Twelve years of commerce and its hazards left him a bankrupt in fortune, but brought him back to the calling in which he

was so well fitted to shine. He moved, in 1813, from Bardstown to Lexington, where he at once secured a large practice, especially in diseases of the bones and joints. He was thought to excel in the treatment of fractures of the skull, for the better management of which a trephine was made in Philadelphia, under his direction, which, in his judgment, was superior to any then in use.

The same temper which led him to leave Philadelphia without his medical degree, sail to China, and afterward enter commerce, again asserted itself, and he forsook for the second time his vocation. With his family he now moved to St. Mary's Parish, Louisiana, and engaged in sugar planting. During his residence in the South he served his adopted State in the Senate of the United States. He employed much time in the study of the flora of the West. "During the winter of 1843-4, when Henry Clay was on a visit to New Orleans" (says a writer in the *New Orleans Medical and Surgical Journal*), "we had the pleasure, together with some twenty-five physicians, of spending the evening with him at the house of a medical friend. While at the table one of the company proposed the health of the venerable Dr. Brashear, 'the first and only surgeon in Louisiana who had successfully performed amputation at the hip-joint.' Mr. Clay, who sat next to Dr. Brashear, with characteristic good humor, immediately observed, 'He has you on the hip, Doctor,' to the great amusement of Brashear and the rest of the company."

Dr. Brashear was a man of fine literary taste and many and varied accomplishments. In conversation he was always entertaining, often brilliant. His voice was pleasant, his manners affable. In stature he was short; in movement quick and nervous. But in the make-up of the man one essential of true greatness—fixedness of purpose—had been omitted. He lacked the staying qualities. He was "variable and fond of change." "His full nature, like that river of which Alexander broke the strength, spent itself in channels which led to no great name on earth." By a single exploit, at the age of thirty, he carved his name at high-water mark among the elect in surgery.

Most of his life thereafter he wasted in desultory labors. As the learned Grotius said of his own life, he consumed it in levities and strenuous inanities.

He died at an advanced age at his home in Louisiana.

1809. Three years after Brashear had won his unparalleled success at Bardstown, a practitioner already of wide repute as a surgeon, living in Danville, a neighboring village, did the second piece of original surgical work in Kentucky. It consisted in removing an ovarian tumor. The deed, unexampled in surgery, is destined to leave an ineffaceable imprint on the coming ages. In doing it Ephraim McDowell became a prime factor in the life of woman; in the life of the human race. By it he raised himself to a place in the world's history alongside of Jenner as a benefactor of his kind; nay, it may be questioned if his place be not higher than Jenner's, since he opened the way for the largest addition ever yet made to the sum total of human life.

So much has been written of this, McDowell's chief work, that I feel it needless to dwell upon it. All students of our art are familiar with it as presented by abler hands than mine. What I shall say of him, therefore, will relate rather to his life and general work than to the one operation by which his name has come to be the most resounding in all surgery. This is a much more difficult task than at first it might seem to be, for McDowell made no sketch of himself, nor have his brothers or his children left us any record of his life. Even his early biographers failed to gather from his surviving friends those personal recollections of the man which would now be of such exceeding interest to us all. An authentic life-size portrait of Ephraim McDowell, as he was seen in his daily walk among men, can not now be made. The materials are too scant; the time to collect them has gone by. A profile, a mere outline drawing, is all that is possible to-day. The picture I have attempted, therefore, will be found deficient in many details which have passed into general acceptance.

It is known that he came of a sturdy stock, his blood being especially rich in two of the

best crosses—the Scotch-Irish. His great-grandfather rebelled against the hierarchy of his time, and enlisted as a Covenanter under the banner of James I. After honorable service he laid down his arms, gathered his family together, and came to America. It was in honor of this ancestor that the subject of the present sketch was named.

The maiden name of his mother was McClung. She was a member of a distinguished family of Virginia. McDowell was born in Rockbridge County, Virginia, on November 11, 1771. He was the ninth of twelve children. His father, Samuel McDowell, was a man of note and influence in the State and was honored with many positions of trust. In 1773 he removed with his family to Kentucky, settling near Danville. He was made judge of the District Court of Kentucky, and took part in organizing the first court ever formed in the State. He lived to see his son confessedly the foremost surgeon south of the Blue Ridge. But it was not given to eyes of that day to see that the achievements of the village operator had illuminated all the work which has since been done in the abdominal cavity, that one had grown up and toiled in their midst,

“Whose influence ineffable is borne

Round the great globe to cheerless souls that yearned

In darkness for this answer to their needs.”

Ephraim's early education was gotten at the school of the town in which he lived. He completed his school studies at an institution of somewhat higher pretensions, situated in a county near by. No anecdotes are preserved of his childhood. During his school-age he clearly preferred the out-door sports of his companions to the in-door tasks of his teachers. On quitting school he crossed the Alleghanies and became an office pupil of Dr. Humphreys, of Staunton, Va. After reading under this preceptor for two years, he repaired to the University of Edinburgh. The Scotch metropolis was then styled the “Modern Athens.” It afforded opportunities at that time for acquiring a medical education the best in all the world. It was then to the medical profession what Leyden had been in the days of Sir Thomas Browne, what Paris became when

Velpeau and Louis taught there. He entered the private class of John Bell, whose forceful teachings and native eloquence made a lasting impression on the mind of his youthful hearer. It has been said that McDowell conceived the thought of ovariectomy from some suggestions thrown out by this great man. The only distinction he is known to have won while in Edinburgh was that of having been chosen by his classmates to carry the colors of the college in a foot-race against a professional. In this it appears he was an easy first. He came away without a diploma. But what was of far greater value than a degree, he brought back the anatomical and surgical knowledge which was to place him in the front of his profession.

He returned to Kentucky in 1795, and settled among the people who had known him from boyhood. His success was immediate, and yet Dr. Samuel Brown, who knew him in Virginia, and was his classmate in Scotland, had said, when asked of him: "Pish! he left home a gosling and came back a goose." In a little while he commanded all the surgical operations of importance for hundreds of miles around him, and this continued till, some years later, Dudley returned from Europe to share with him the empire of surgery.

In 1802, fully established in his profession, and with an income which rendered him independent, he married Sarah, daughter of Governor Isaac Shelby.

In 1809 he did his first ovariectomy. He believed the operation to be without precedent in the annals of surgery, yet he kept no note of it or of his subsequent work. He prepared no account of it until 1817. This appeared in the *Eclectic Repertory*. It was so meager and so startling that surgeons hesitated to credit its truth. He had not mastered his mother tongue. The paper was thought to bear internal evidence of its author's having "relied upon his ledger for his dates and upon his memory for the facts." The critics from far and near fell upon him. The profession at home cast doubt upon the narrative. The profession abroad ridiculed it. For all that, McDowell kept his temper and his course, and when he finally laid down his knife he had a

score of thirteen operations done for diseased ovaria, with eight recoveries, four deaths, and one failure to complete the operation because of adhesions.

It would be neither fitting nor becoming on this occasion, and in this presence, to speak in detail of the technic observed by McDowell in his work. That has long since passed into history. I may, however, be permitted the remark that the procedure, in many of its features, is necessarily that of to-day. The incision was longer than that now usually made, and the ends of the pedicle ligature were left hanging from the lower angle of the wound. But the pedicle itself was dropped back into the abdomen. The patient was turned on her side to allow the blood and other fluids to drain away. The wound was closed with interrupted sutures. This marvel of work was done without the help of anesthetics or trained assistants, or the many improved instruments of to-day, which have done so much to simplify and make the operation easy. McDowell had never heard of antiseptics, nor dreamed of germicides or germs; but water, distilled from nature's unpolluted cisterns by the sun, and dropped from heaven's condensers in a clean blue sky, with air winnowed through the leaves of the primeval forest which deepened into a wilderness about him on every hand, gave him and his patients aseptic facility and environment which the most favored living laparotomist well might envy. These served him well, and six out of seven of his first cases recovered. He removed the first tumor in twenty-five minutes, a time not since much shortened by the average operator.

It was not alone, however, in this hitherto unexplored field of surgery that McDowell showed himself a master. His skill was exhibited equally in other capital operations. He acquired at an early day distinction as a lithotomist, which brought to him patients from other States. He operated by the lateral method, and for many years used the gorget in opening the bladder. At a later period he employed the scalpel throughout. He performed lithotomy thirty-two times without a death. Among those who came to him to be cut for stone was a pale, slender boy, who had

traveled all the way from North Carolina. This youth proved to be McDowell's most noted patient. He was James K. Polk, afterward President of the United States.

Dr. McDowell's "heart was fully open to the lesson of charity, which more than all men we should feel," and he dispensed it with constant remembrance of the sacred trust imposed upon us. Yet he had a proper appreciation of what was due his guild from those whose means allowed them to make remuneration for professional services. He charged \$500 for an ovariectomy that he went to Nashville, Tenn., to do. The husband of the patient gave him a check, as he supposed, for that sum. On presenting it, the doctor discovered that it was drawn for \$1,500 instead of \$500, whereupon he returned the check, thinking a mistake had been made. The grateful gentleman replied that it was correct, and added that the services much outweighed the sum paid. When the fact is borne in mind that the purchasable value of money was much greater in the first than in this the last decade of the century, it will be seen that the "father of ovariectomy" at least set his successors in the field a good example. This is made conspicuous by the fact that Sir Spencer Wells has seldom charged a larger sum, and has declared £100 to be a sufficient fee for the operation.

In person Dr. McDowell was commanding. He was tall, broad-shouldered, stout-limbed. His head was large, his nose prominent and full of character, his chin broad, his lips full and expressive of determination, his complexion florid, his eyes dark—black. His voice was clear and manly; he often exercised it in recitations from Scotch dialogues, when he would roll the Scotch idiom upon his tongue with the readiness of a native. He was fond of music, especially comic pieces, which he sang with fine effect, accompanying his voice sometimes with the violin.

He was a man of the times, taking an active interest in the affairs of the community in which he lived. He had many books for that day. Cullen and Sydenham were his chief authorities in medicine; Burns and Scott in literature. He was fond of reading, yet he was inclined to action rather than study.

He placed great reliance on surgery and its possibilities; he placed little trust in drugs. He counseled against their too liberal use. In truth, he did not like the practice of medicine, and turned over most of his non-surgical cases to his associate in business. In manner he was courteous, frank, considerate, and natural. He was a simple, ingenuous man. His great deeds had given him no arrogance. His was a clean, strong, vigorous life. His spirit remained sweet and true and modest to the last. He lived a God-fearing man, and died on June 25, 1830, in the communion of the Episcopal Church.

1813. While McDowell was so busily engaged in his special line of surgery, his co-laborers elsewhere in the State were not idle. Four years after his first ovariectomy, the first complete extirpation of the clavicle ever done was accomplished by Dr. Charles McCreary, living in Hartford, Ohio County, Ky., two hundred miles, as the crow would fly, farther into the wilderness. The patient was a lad named Irvin. The disease for which the operation was done was said to be scrofulous. Recovery was slow but complete. The use of the arm remained unimpaired, and the patient lived, in good health, to be forty-nine years old.

In 1829, sixteen years after the back-woods surgeon had achieved his success, Professor Mott repeated the operation, also on a youth, with a like fortunate result, and, believing he was first in the field, claimed the honor of the procedure for the United States, for New York, and for himself. He termed it his "Waterloo operation," not, however, because it surpassed, as he declared, in tediousness, difficulty, and danger any thing he had ever witnessed or performed, but because, as it appears, it fell on the 18th of June, the anniversary of the battle of Waterloo.

Mott's operation required nearly four hours for its execution, and the tying of forty vessels; but after all it proved to be not a complete extirpation; for the autopsy, made many years later, showed three quarters of an inch of the bone at the acromial end still in its place. Yet the case passed quickly into the annals of surgery and added much to the already great

renown of the operator. To this day it is referred to by surgical writers as "Mott's celebrated case," and the description of his procedure is often given in his own words.

McCreary removed the entire collar bone, and that while a young practitioner, living in a village composed of a few scattering houses, situated in a new and sparsely settled country, where opportunities for cultivating surgical science were necessarily rare, and the means for acquiring anatomical knowledge necessarily small.

The only published report of McCreary's case is from the pen of Dr. Johnson, in the *New Orleans Medical and Surgical Journal* for January, 1850. The account, though all too brief, clearly establishes the date of the operation, its successful issue, and the removal of the entire bone.

It is greatly to be regretted that more is not known of McCreary's personal and professional character. He is said, by one who met him often, to have been a serious, thoughtful man, given to study, devoted to his calling, and fatally fond of drink, to which he fell a victim when but thirty-seven years of age.

1814. A younger man than either of those I have attempted to sketch, Dr. Benjamin Winslow Dudley, now came upon the stage. He, too, was the son of a pioneer. His early training was much like that of his contemporaries. Like Brashear, he had instruction in the office of Dr. Ridgely. Like him he had attended lectures at the University of Pennsylvania. Unlike him, he carried away its diploma. This he did in 1806, just two weeks before he was twenty-one years old. He came home, opened an office, and offered his services to the public. The public gave him little business. He was deficient either in the knowledge or in the self-trust necessary to professional success. McDowell was located in a village hard by—was applying himself mainly to surgery, and was already in full practice. Dudley resolved to still better qualify himself for the work he was ambitious to do. He longed to go into the hospitals and follow the great teachers of Europe, but lacked the means. To get these he made a venture in trade. He purchased a flat-boat, loaded it with produce,

headed it for New Orleans, and floated down the Kentucky, the Ohio, and the Mississippi rivers to the desired port. He invested the proceeds of his cargo in flour. This he billed to Gibraltar, which he reached some time in 1810; there and at Lisbon he disposed of it at a large advance.

The opportunities he had sought were now near at hand. He hastened through Spain to Paris. While there he heard Baron Larrey recite his wonderful military experience. He made the acquaintance of Caulaincourt, "the Emperor's trusted minister." Through him he was present with Talma and John Howard Payne in the Chamber of Deputies when Napoleon entered the building at the close of his disastrous Russian campaign. He saw the Emperor mount the tribune. He heard him begin his report with these portentous words: "The Grand Army of the Empire has been annihilated."

Remaining in Paris nearly three years, he crossed the Channel to observe surgery as practiced in London. While there he listened to Abernethy as he dwelt with all his wonted enthusiasm on his peculiar doctrine. He heard him reason it; he saw him act it, dramatize it, and came away believing him to be "the highest authority on all points relating to surgery, as at once the observant student of nature, the profound thinker, and the sound medical philosopher." He always referred to him as the greatest of surgeons. He saw Sir Astley Cooper operate, and habitually designated him as the most skilled and graceful man in his work he had ever known.

He returned to Lexington in the summer of 1814, "in manners a Frenchman, but in medical doctrine and practice thoroughly English." The public was quick to detect that he had improved his time while away. "His profession had become the engrossing object of his thought, and he applied himself to it with undeviating fidelity. He made himself its slave." One who knew him well wrote of him: "He had no holidays. He sought no recreation; no sports interested him. His thoughts, he had been heard to say, were always on his cases, and not on the objects and amusements around him." He found Lexington in the midst of an

epidemic of typhoid pneumonia, the same that had prevailed in the older States. This singularly fatal disease was followed by a "bilious fever, characterized, like the plague, by a tendency to local affections. Abscesses formed among the muscles of the body, legs, and arms, and were so intractable that limbs were sometimes amputated to get rid of the evil." Recalling the use he had seen made of the bandage, while abroad, in the treatment of ulcers of the leg, Dudley applied this device to the burrowing abscesses he saw so frequently in the subjects of the fever. The true position and exceeding value of the roller bandage were not so generally recognized then as now. Dr. Dudley was no doubt himself surprised at the success which followed the practice. This success probably led him to urge that wide application of the bandage with which his name came in time to be so generally associated.

The tide of practice now set full toward him. He had come home a thorough anatomist. With opportunity he exhibited surpassing skill in the use of the knife. His reputation soon became national.

No medical school had at that time been founded west of the Alleghanies. The need of such an institution was felt on every hand. Transylvania University, already of established reputation, was in operation. It required only a school in medicine to make it complete in its several departments. The trustees met in 1817 and added this to its organization. Dr. Dudley was made its head and appointed to fill the chairs of anatomy and surgery. A small class of students assembled in the autumn. At the commencement exercises held the following spring, W. L. Sutton was admitted to the doctorate — the first physician given that distinction by an institution in the West. Troubles arose in the faculty. Resignations were sent in and accepted. Dr. Richardson, one of the corps, challenged Dr. Dudley. A meeting followed. Richardson left the field with a pistol wound in his thigh which made him halt in his gait for the rest of his life. The year following a second organization was effected, which included the two belligerent teachers.

The history of the Medical Department of

Transylvania University — its rise, its success, its decline, its disappearance from the list of medical colleges — would practically cover Dr. Dudley's career, and would form a most interesting chapter in the development of medical teaching in the Southwest. But it must suffice me here to say that Dr. Dudley created the medical department of the institution and directed its policy. Its students regarded him from the beginning as the foremost man in the faculty. That he had colleagues whose mental endowments were superior to his he himself at all times freely admitted. He is said to have laid no claim to either oratorical power or professional erudition. He was not a logician, he was not brilliant, and his deliverances were spiced with neither humor nor wit. And yet, says one of his biographers, in ability to enchain the students' attention, to impress them with the value of his instructions and his greatness as a teacher, he bore off the palm from all the gifted men who, at various periods, taught by his side. A friend and once a colleague described his manner while lecturing as singularly imposing and impressive. "He was magisterial, oracular, conveying the idea always that the mind of the speaker was troubled with no doubt. His deportment before his classes was such as further to enhance his standing. He was always, in the presence of his students, not the model teacher only, but the dignified, urbane gentleman; conciliating regard by his gentleness, but repelling any approach to familiarity; and never for the sake of raising a laugh or eliciting a little momentary applause descending to coarseness in expression or thought. So that to his pupils he was always and everywhere great. As an operator they thought he had distanced competition. As a teacher they thought he gave them not what was in the books, but what the writers of the books had never understood. They were persuaded that there was much they must learn from his lips or learn not at all." His hold upon the public was as great as that upon his classes. "Patients came to him from afar because it was believed that he did better what others could do than any one else, and that he did much which no one else in reach could do."

During the larger part of Dr. Dudley's life few physicians in any part of America devoted themselves exclusively to surgery. The most eminent surgeons were general practitioners — all-round men. In this class Dr. Dudley was equal to the best. In one respect, at least, he took advance ground—he condemned blood-letting. He was often heard to declare that every bleeding shortened the subject's life by a year. Admiring Abernethy more than any of his teachers, his opinions were naturally colored by the views of this eccentric Englishman. Like him he believed in the constitutional origin of local diseases, but his practice varied somewhat from that of his master. Like him he gave his patients blue pill at night but omitted the black draught in the morning. He thought an emetic better, and secured it by tartarized antimony. Between the puke and the purge his patients were fed on stale bread, skim milk, and water-gruel. And this heroic practice he pursued day after day, for weeks and months together, in spinal caries, hip caries, tuberculosis, urethral stricture and other diseases.

I said that as a physician he was equal to the best. As we see things to-day this would not, perhaps, be saying much; but in fact he was better than the best. Negatively, if not positively, he improved upon the barbaric treatment of disease then in universal favor. He wholly discarded one of the most effective means by which the doctors succeeded in shortening the life of man. This was just before those biological dawnings which were soon to break into the full light of physiological medicine and the rational system of therapeutics based thereupon. And it is not improbable that as a watcher in that night of therapeutical darkness, where the doings of the best strike us with horror, his prophetic eye caught some glimpses of the coming day which in old age it was given him to see. Though engaged chiefly with the great things in surgery, he deserves a place in the list of therapeutic reformers.

Much of the renown acquired for Kentucky by her surgeons was in the treatment of calculous diseases. This State is believed to have furnished almost as many cases of stone as all

the rest of the Union. Dr. Dudley stands the confessed leader of American lithotomists, heading the list with two hundred and twenty-five cases. Of these he presents an unbroken series of one hundred consecutive successful operations. He used the gorget in all. He preferred the instrument invented by Mr. Cline, of London. "In one case, when his patient was on the table, he discovered that his accustomed operation was impracticable from deformity of the pelvis, and while his assistants were taking their positions resolved to make the external incision transverse, which was executed before any one else present had remarked the difficulty." Through this incision he removed a stone three and a half inches in the long diameter, two and a half inches in the short, by eleven inches in circumference. The patient recovered.

In an article contributed to the *Transylvania Journal of Medicine* by Dr. Dudley, in 1828, he thus wrote of the trephine: "The experience which time and circumstances have afforded me in injuries of the head induced me to depart from the commonly received principles by which surgeons are governed in the use of the trephine. In skillful hands the operation, beyond the atmosphere of large cities, is neither dangerous in its consequences nor difficult in the execution." In this remark Dr. Dudley bore early testimony to the efficacy of aseptic surgery. He urged the trephine in the treatment of epilepsy and applied it in six cases—in four of which the disease was cured. The result in the two remaining cases is unknown, because the patients were lost sight of.

Dr. Dudley believed himself to be the first surgeon who ever attempted to treat *fungus cerebri* by gentle and sustained pressure made with dry sponge aided by the roller. Of the first cases in which he used it, he wrote: "By imbibing the secretions of the part, the pressure on the protruded brain regularly and insensibly increased until the sponge became completely saturated. On removing it the decisive influence and efficacy of the agent remained no longer a matter of doubt." He noted the difficulty experienced in removing the sponge because of its being extensively penetrated by blood-vessels springing from the

surface of the brain. This inconvenience he afterward obviated by putting a thin piece of muslin between the fungus and the sponge. He saw in this property of the sponge what no doubt others had seen before, the phenomenon of sponge-grafting, but like them he failed to utilize it in practice.

Dr. Dudley was not a student of books. He had no taste for literature. He wrote but little, and that only for the *Transylvania Journal of Medicine*, edited by two of his colleagues, Professors Cooke and Short. His first article did not appear until 1828, fourteen years after he had begun practice. It was on injuries of the head. It abounded in original views, and did much to shape surgical thought at the time. To-day it may be consulted with profit. His second paper was on hydrocele; in this he advocated the operation by incision and removal of the sac. He read so little that he fell into the error of believing that he was the originator of the procedure. There are writers in our own day who would be able to hold their own against him in this particular. A paper on the bandage, another on fractures, and one on the nature and treatment of calculous diseases, embrace all his contributions to medical literature.

Dr. Dudley was the son of Ambrose Dudley, a distinguished Baptist minister. He was born in Spottsylvania County, Virginia, April 25, 1785. When but a year old he was brought by his father to the then county of Kentucky. The family settled in Lexington, in which beautiful city the child became a man, and lived and wrought and died. The date of his death is January 25, 1870; his age was eighty-five years.

Dr. Dudley was a man of affairs. His practice was always large and paid him well. He amassed a handsome fortune. His opinions were often sought in courts of justice on professional points, where his dignity, self-possession, and dry wit (which he seems to have suppressed at the lecturer's desk), commanded the respect of judge, juror, and advocate, while it made him the terror of the pettifogger. Once, while giving expert testimony in a case involving a wound made by bird-shot delivered at short range, he described the behavior of

projectiles, and the danger of bullet wounds. The opposing counsel interrupted him: "Do you mean to say," said the lawyer, "do you mean to say, Dr. Dudley, that shot wounds are as dangerous as bullet wounds?" "Shot are but little bullets," was the unhesitating reply.

Dr. Dudley had also a proper sense of the value of his professional services. He was called on one occasion to a town near Lexington to attend a patient in labor, who was the wife of a man made rich by marriage. The husband was too wise to engage a "night rider," and too purse-proud to call the village doctor. At that time most of the one hundred dollar notes in circulation in Kentucky were issued by the Northern Bank, at Lexington. On the reverse side of the bill was the letter C in Roman capital. This letter was so round in figure that it looked like a "bull's-eye," and in local slang was so called. The visit being over, and the doctor ready to leave, the young father handed him one of these notes. Eyeing it for a moment, Dr. Dudley said: "Another 'bull's-eye,' Mr. X., if you please."

In person Dr. Dudley was of medium size. His features were refined, the forehead wide and high, the nose large and somewhat thick, the lips thin, the eyes bluish gray. His hair was thin, light, and of a sandy tint. He was a graceful man. His voice was pleasing; his manners courtly; his bearing gracious.

He married Miss Short, daughter of Major Peyton Short, in 1821. He delivered his last lecture in 1850, and the last entry on his ledger bears the date of April 28, 1853.

I can not give these remarks more fitting close than by describing briefly the surroundings which set their impress upon the character of the men whose lives I have attempted to portray. The picture is full of meaning, dignity, and simplicity. In this time "Cane-tuckee" was still a part of Virginia. The grounds on which, as boys, they played were held by their fathers under what is known as a "tomahawk claim." "Beyond lay endless leagues of shadowy forest." "The Illinois" had not been admitted into the sisterhood of the States. The vast domain west of the

Mississippi River was unexplored. The city of St. Louis was but an outpost for traders. The name "Chicago" had not been coined. Fort Dearborn, occupied by two companies of United States troops, marked a roll in the prairie among the sloughs where stands to-day the queen and mistress of the lakes. Cincinnati had no place on the map, but was known as Fort Washington. General Pakenham had not attempted the rape of New Orleans, and General Jackson, who was to drive him with his myrmidons fleeing to his ships, was unknown to fame. Wars with Indians were frequent. Massacres by Indians were common. The prow of a steamboat had never cut the waters of a Western river. Railroads were unknown in the world. There were but two avenues by which Kentucky could be reached from the East. One was the water-way, furnished by the Ohio River. The other was the "Wilderness Road," "blazed" by Daniel Boone. The former was covered in keel-boats, flat-boats, and canoes. The latter was traveled on horseback or on foot. No wheel had broken it or been broken by it. The fathers of the subjects of this narrative followed this road after crossing the Alleghanies. They were a clear-eyed, a bold, an adventurous people. They wrested the land from the savage, made it secure by their arms, and by the toil of their hands fitted it for its present civilization. Among these, and such as these, these heroes in the bloody exploits of surgery were reared. From such ancestors they drew that dauntless courage which was so often tried in their achievements—achievements the fame of which will not lapse with the lapse of time. Boone had opened the way to the wilderness around them. He "blazed" a path through its unbroken depths, along which the stream of civilization quickly flowed. They blazed a path through the unexplored regions of their art along which surgeons continue to tread. His name is written in the history of his adopted State and embalmed in the traditions of its people. Their names are written in the chronicles of their beloved calling and upon the hearts of myriads of sufferers whom their beneficent labors have relieved. They may or may not have felt that their work was durable.

But durable it is, and it hands down to posterity a *monumentum aere perennius*, the absolute worth of which passes computation. No present or future modification of this work can rob its authors of that glory which crowns the head of the original workman.

Like their kinsmen in genius, these toilers devised measures and dealt with issues in advance of their time. Like them they enjoyed but scant recompense for labors the far-reaching significance of which they did not comprehend. Let us who are reaping in the harvest which they sowed forget not how much we are beholden to these immortal husbandmen. And as we contemplate the shining record of their deeds, let it counsel us to "bend ourselves to a better future." Not that we may hope to rival their sublime achievements, but that each in his walk, however humble it may be, may strive to enlarge the sphere of his usefulness by making surgery the better for his having practiced it.

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PNEUMONOTOMY FOR ABSCESS.*

BY TURNER ANDERSON, M. D.

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On the 28th of February I was called to see John S., a well-developed, muscular man, thirty-two years of age. He had left his home in the morning feeling unwell, and while working at his occupation of stove molding had a severe chill. His health up to this date had been uninterruptedly good. He occasionally drank beer, but in moderate amounts only, and had never been intemperate.

I saw him at five o'clock in the afternoon. His temperature was 104°; pulse 120. He had pains in the left side and increased frequency of respiration. Auscultation revealed crepitant râles over the lower lobe of the lung. On the following day, March 1st, a diagnosis of pneumonia was easily made. The disease was confined to the left side and involved both lobes of the lung. His chest was enveloped in absorbent cotton

*Read at the July meeting of the Louisville Surgical Society.

covered with oiled muslin, and a dose of Rochelle salts given; also one fourth of a grain of morphine with fifteen grains of bromide of potash was given as often as required to secure comfort.

March 2d. Patient at easy rest. Cough not unusually frequent or painful. Sputa reddish-brown, tenacious and typically characteristic. Respiration 30; pulse 120; temperature 103.5°. From this date until the 7th the progress of the case was satisfactory and without unusual symptoms. On the 7th profuse sweating occurred, followed by improvement in all the symptoms.

On the 8th resolution was progressing favorably in the upper lobe of the lung, and the *crepitans redux* could be heard over the entire lobe. The lower lobe remained heptatized. On the 9th the patient manifested evidences of weakness, he had a cold stage followed by a temperature of 104° Fahrenheit, and sweated profusely. On the 10th his breath became fetid and he expectorated mouthfuls of very stinking, bloody muco-purulent stuff, showing upon examination shreddy particles. His strength rapidly left him; he was unable to move himself in bed, and voided his urine and feces involuntarily. The fetor of his expectoration was so great as to render the room scarcely habitable. His features were pinched, and he was constantly incoherently delirious. It was thought that he could live but a short time. The aspect of the case was at this time so grave I felt that unless relief could be promptly given an unfavorable termination was inevitable. It was clear to my mind that gangrene of the lower lobe of the lung had occurred, and that the man's vital forces were too greatly enfeebled for me to entertain the hope of his being able to remove the necrosed portion of lung by expectoration. It also appeared probable that a large purulent cavity existed in the lung. With this idea in view I determined:

1. Upon aspiration of the lung.
2. If a cavity was found, to do a pneumonotomy and establish free drainage through the chest wall.

I accordingly introduced a long aspirator needle in the sixth intercostal space, one inch behind the axillary line, and drew off a syringe-ful of pus. Two hours later, in the pres-

ence of Drs. T. L. McDermott and T. S. Bullock, I removed by aspiration three pints of highly fetid purulent material. The operation was followed by temporary relief. The patient expressing himself as having been given new breathing space.

On the 11th, the day following the aspiration, he seemed considerably better, but on the 12th, the second day afterward, he was much worse, and was so extremely ill that it was feared dissolution was imminent. I now determined upon free drainage, and, in the presence of Dr. Bullock, I made an incision two inches long over the seventh interspace, one inch back of the axillary line, down to the intercostal muscles, and introduced a large sized trocar, five inches long, into the lung. Upon removing the trocar I was surprised to find that blood only flowed through the canula. Letting this remain for the time in place, I introduced a long aspirating needle of small size, attached to an exhausting syringe, in a more backward and upward direction and filled the latter with pus. Taking this as my guide, I thrust the trocar into the cavity, and upon removing it drew off more than a pint of purulent material. I next dilated the opening with the long-catch-forceps and passed a fenestrated rubber tube, one fourth of an inch in diameter and six inches long, into the cavity. The drainage was now perfect and the cavity was soon emptied. Upon inspiration and expiration air freely passed through the tube with a loud noise. After securing the tube with a safety pin and bandage it was left open that it might have as perfect drainage as possible.

The benefit of the drainage thus obtained was marked, and on the next day, the 13th of March, or the fourteenth day of his sickness, the whole aspect of the case was changed for the better. He still expectorated fetid pus and blood, but with greater ease and in much diminished amounts. I now deemed it proper to wash out the cavity, and selected a weak solution of warm carbolyzed water for the purpose, using a hard rubber syringe with a long nozzle. Upon throwing the fluid through the tube it invariably excited paroxysms of coughing, while some of the water passed into the trachea and was expectorated *per os*; the

larger portion of the injection being returned forcibly through the tube into the basin.

The patient's condition from this date steadily improved. His fever ceased, cough declined, suppuration lessened, and at the end of a week he was fairly convalescent. The cavity was washed out twice daily at first, and subsequently once in twenty-four hours only. On the 25th of April he was exhibited at a meeting of the Medico-Chirurgical Society of Louisville, and examined by the Fellows. His cough had now entirely ceased, but was still excited in active paroxysms whenever fluid was injected into the tube. A demonstration of this was made before the Society. On the 28th I ceased the injection and commenced shortening the tube.

On the 9th day of May I again presented him at a meeting of the same Society, and removed the remaining portion of tube, which had been reduced to three inches in length. All discharge ceased, and the opening closed two days later. He wore the drainage-tube fifty-nine days in all—forty-eight days before it was shortened at all, and nine days after it had been reduced to one half of its original length. He is now well.

The last report in surgery made before this Society (1889), by Dr. W. L. Rodman, of Louisville, refers to the operation of pneumonotomy, and quotes from a Russian authority showing that the operation had been done, up to that date, eighteen times for abscess, with a mortality of fifty per cent.

In connection with this case an obstetrical point of some interest bearing upon antiseptic midwifery presented itself.

The patient resided in a cottage of four rooms. One of the rooms was used as a parlor, another as a kitchen, leaving but two rooms for the accommodation of himself, wife, and five children. These rooms adjoined and were connected by a single door. His wife was constantly at his bedside and assisted in his nursing. She was pregnant at full term, and on the 22d of March 1 safely delivered her of her sixth child. In view of the unsanitary condition of the premises and the putrid odor in the apartments, I considered it unsafe for her to be confined at home and arranged to have her re-

move to the home of her mother a few squares away. My advice however was not followed, and I was called on the evening of the 22d, finding her in active labor. Before making an examination I had the vulva carefully washed with a $\frac{1}{2000}$ solution of mercuric chloride. The hands, legs, and abdomen of the patient were also sponged with a solution of the same strength. My own hands were rendered aseptic with the nail-brush, water, soap, and a bichloride solution. Her labor was normal, and the puerperium unattended by accident. No intravaginal injections were used. The only additional antiseptic precautions resorted to were the washing of the external parts in a $\frac{1}{4000}$ solution of bichloride and the application to the vulva of cloths wrung out of this solution.

LOUISVILLE.

PENETRATING KNIFE WOUND OF THE ABDOMINAL CAVITY.*

BY A. M. CARTLEDGE, M. D.

Professor of Principles and Practice of Surgery, Louisville Medical College.

Fred Rosenhaur, aged twenty-five years, carpenter, on the evening of May 11, 1890, while out walking, was embraced by a drunken man and stabbed in the right inguinal region about one inch above the internal abdominal ring. He felt little pain or inconvenience from the wound, and walked a distance of ten blocks to my office. On examination I found at the point indicated a nearly transverse wound, little more than half an inch long, through which protruded a mass of omentum the size of a small orange. No hemorrhage, as the plug of omentum tightly occluded the wound. Pulse 80, no evidence of shock. I apprised the man of the dangerous nature of his wound, and after applying a temporary sublimate gauze dressing, sent him home for further examination and dressing. When I reached his home he was in the same comfortable state of half an hour before. I shaved the belly around the wound, applied towels rung out of sublimate sol. 1 to 1,000, washed the omental protrusion carefully, and attempted its reduction. Finding this impossible, I transfixed the base close to the wound,

* Read before the Louisville Surgical Society, June 9, 1890. For discussion see page 13.

tied, and cut it off. The stump was with some difficulty returned through the small wound. No hemorrhage of consequence appeared after reduction. One deep stitch was taken and the parts dressed with iodoform and sublimate gauze. All did well until end of the second day, when the belly became very tympanitic; temperature 99.5°, pulse 90; some pain; magnesia sulph. in ʒiii dose every three hours failed to move the bowels; as did also an enema. On the morning of the third day I had him moved to the Norton Infirmary preparatory to doing a section of the abdomen if necessary. Here the magnesia was continued, together with frequent large enemata of warm water and glycerine. After twenty hours our efforts were rewarded with a large movement. From this on the case was without interest, except the development of a small abscess in the parietal wound, which contained about half an ounce of pus, and which I attributed to the contact of the dirty knife which inflicted the wound.

I report this otherwise uninteresting case at some length as illustrating some nice points in penetrating stab wounds of the abdomen. I believe I am on record, in this Society or somewhere else, as saying that I thought all penetrating knife or shot wounds of the abdomen should be subjected to an exploratory incision, and yet the case just reported was so free from any evidence of shock, as manifested by pulse or otherwise, that I could not resist the temptation to try the expectant plan. I attribute the marked tympanites and slight pain to the local disturbance of the peritoneum at the point of the wound, but more likely it was due to a pretty large blood clot in the cavity, a general peritonitis being obviated by the alimentary drainage. I still think the cases for such a course of treatment are few indeed.

THE cholera in Spain is diminishing. It was reported on June 28th that there had been no further deaths from cholera in Valencia, and only three new cases reported in the province. There had been no new cases at any port or place near the coast in the last forty-eight hours. Should the condition continue to improve, the quarantine will probably be raised against arrivals from Valencia.

SIX CASES OF EMPYEMA.*

BY W. O. ROBERTS, M. D.

Professor of the Principles and Practice of Surgery, University of Louisville.

Of the six cases of empyema which form the subject of this report, five occurred in the male, and one in the female; four were instances of the chronic, and two of the acute form of the disease; five followed simple pleurisy; one was of traumatic origin; in four the fluid was in the left pleura, in two it was in the right side; in one the empyema was circumscribed and communicated with the lung. The patients were aged respectively fifty-two, thirty-three, thirty, twenty-eight, twenty-one, and sixteen years.

I operated on two at Sts. Mary and Elizabeth Hospital; on one at the Surgical Clinic of the University; on one in Jeffersonville, Indiana, kindly referred to me by Dr. David Fields of that town; one was in Salem, Indiana, the patient being under the care of Dr. Charles Murphy; while one was a case in private practice, in which I had the assistance of my colleague, Professor Turner Anderson, and Dr. Edward Pearce.

Five of the six cases made satisfactory recovery. One, the patient with the circumscribed cavity and pulmonary fistula, died.

In two of the cases at the hospital the disease occupied the left pleura, and had existed more than twelve months. The symptoms were well marked in both. The area of dullness reached the spine of the scapula; the heart was displaced; there was much bulging of the affected side with marked narrowing of the intercostal spaces.

The case at the clinic originated in a pistol-shot wound. The patient came from a distance, and was sent to Professor Yandell, who kindly allowed me to operate. The patient was thirty-three years old, six feet two inches tall, and weighed at the time of the injury, eight months before, two hundred pounds.

When he reached the clinic he weighed a little over one hundred pounds. The ball had entered the third intercostal space about three inches from the sternum. Some pus escaped

*Read before the Louisville Surgical Society, June 9, 1890.
For discussion see page 16.

from it most of the time, but when the patient was lying down pus trickled from it continuously. There was marked dullness over the injured side below the seat of the wound. The intercostal spaces were almost obliterated. When the matter was evacuated its odor was sickeningly offensive. Six months later the patient had recovered so entirely that no one who had seen him at the time of the operation would have recognized him.

The case at Salem, Indiana, which was in the person of a farmer of good family history and of previous robust health, fifty years old, was a circumscribed empyema communicating with the lung. The trouble occurred April 9, 1888, when he had an attack of pleuro-pneumonia, from which he never recovered. He was confined to bed for two or three weeks, and then improved sufficiently to be about his place, but complained more or less constantly of pain in his side, dyspnea, poor appetite, and a troublesome cough, with muco-purulent expectoration which was frequently tinged with blood. On April 1st rigors set in with fever and copious sweats; the patient quickly became too feeble to leave his bed; I saw him on the morning of April 9th. He was then quite weak, pulse 112, temperature 100° F.; surface jaundiced, urine scant and heavy, harassing cough with copious muco-purulent expectoration deeply stained with blood. There was marked dullness over the middle and lower lobes of the right lung with absence of respiratory murmur. I made several punctures with the aspirator needle before getting pus, and when found it was so thick that only a few drops would come through the needle of the largest size. After the cavity was opened only about three ounces of a very thick purulent matter, similar to that which had been expectorated, escaped. A small quantity of the warm sublimate solution thrown through the tube caused a most violent attack of coughing, and some of the fluid was expectorated. Dr. Murphy writes me that after the operation the cough almost entirely ceased, that the discharge through the tube became copious; the hectic, however, continued, and the patient died April 25th.

The case seen in Jeffersonville, Indiana, a girl sixteen years old, and the one seen with Drs

Anderson and Pearce, a man of twenty-one years, presented the acute type of the disease—pus being detected in one on the tenth, and in the other on the fourteenth day of the attack. In the girl the disease was in the right pleura; the accumulation was very large, dark brownish in color, and offensive. In the young man the left pleura was involved; here the quantity of pus was also large, yellow in color, and contained a great deal of solid matter. It was not offensive.

The treatment pursued in the foregoing cases varied with the condition of the intercostal spaces. In the cases where the ribs were very close together a portion of rib was removed; in those where the ribs were sufficiently apart to admit the index finger between them I simply incised the space. The incision was made in the seventh intercostal space, on a line with the posterior boundary of the axilla. A portion of the seventh rib was removed. Drainage was secured in all by two fenestrated rubber tubes, one fourth of an inch in diameter, placed side by side. Irrigation of the cavity was done by throwing the fluid into one tube, when it could flow out through the other. The fluid used, however, varied with the case. In some it was carbolic acid, in some permanganate of potash, and in others sublimate solution. In all of them great care was taken to change the dressings the moment they became soiled. This required to be done at first daily, and as the discharge lessened the intervals between the dressings were made longer. The tubes were left in place until all discharge had practically ceased, being gradually shortened as the lung expanded.

HONORS TO GERMAN MEDICAL MEN.—The Order of the Red Eagle, third class, has been conferred on Dr. Schweikert, of Breslau. The German Emperor has granted permission to Professor Bramann, of Halle, to accept the Turkish Medjidieh Order, third class, while Dr. Zwingenberg, of Berlin, is allowed to receive the Commander's Cross of the Order of the Kingdom of Italy; and Dr. Mense, of Berlin, the Service Star, conferred by the King of the Belgians as Sovereign of the Congo State.

Societies.

LOUISVILLE SURGICAL SOCIETY.

Stated Meeting, June 9, 1890, D. W. Yandell, M. D.,
President, in the chair.

Dr. A. M. Vance showed two legs removed because of injury. The first was from a child. It was gangrenous before removal. The second was from an adult. The limb had sustained a compound comminuted fracture. The doctor wired the broken tibia after removing a keystone piece. The fibula was not broken. Sloughing began and pus escaped freely from the wound. On the middle of the eighth day grumous blood occupied the cellular planes. The soleus had ruptured. Amputation was done at a point four inches below the knee.

DISCUSSION.

Dr. Roberts saw No. 2 after two or three days. Temperature 101° . The wound showed no sign of decomposition. It was covered with iodoform. Sensation was perfect. On the sixth day the temperature was 100° A.M., 101° P.M. Still not offensive. Saw no pus. He gave the opinion that there was good hope of saving the limb. There was, however, some risk of abscess. He thought it would be six months before the patient would be able to use the limb. He had strongly recommended the attempt to save the limb, but the patient preferred amputation to tedious convalescence. After wiring the position was good. His good results lately in very serious cases led him to urge conservatism. Though the specimen under examination shows great contusion of the calf, the condition does not lead him to modify the opinion as above stated.

Dr. A. M. Cartledge said he should consider this a border-line case. He believed the patient would have gotten well under anti-septic treatment; but the question of a useful limb would have been very doubtful, while a tedious convalescence through a hot summer was one of the conditions of conservatism. While conservatism should be the rule in extra-vascular injuries, he believed that, taking the case for all in all, amputation was the best thing to do. He had advised like treatment in similar cases.

Dr. Vance said that on the appearance of the

large amount of slough he thought that conservatism in the case would result at best in an uncomely and practically useless limb. Later, however, the limb presented such conditions as in his opinion made amputation necessary as a life-saving measure. In any case, a good stump with an artificial limb is to be preferred to a deformed, useless leg.

Dr. A. M. Cartledge read a report of a case, "Penetrating Knife Wound of the Abdomen." (See p. 12.)

DISCUSSION.

Dr. Vance said that he was on record in the opinion that all penetrating knife or gunshot wounds of the abdomen should be thoroughly explored. He thinks that in the case under discussion no one could say that the gut was not wounded. The knife might have made the gut septic as it did the cut in the abdominal wall.

Dr. Roberts agrees with Dr. Vance in his general proposition. In this case he would have tied the protruding omentum at once and cut it off.

Dr. W. L. Rodman said that he was opposed to laparotomy simply for the purpose of exploration in the absence of symptoms indicating a wound in the gut or an important vessel. Recently he had seen two cases of stab wound of the abdomen. In one the omentum was protruding and covered with dirt. He used Senn's gas test, and, obtaining negative results, enlarged the wound, tied and cut off the omentum, returned it, and got a perfect result. In a hundred cases of stab or shot wounds of the abdomen a good number will be found in which laparotomy is not necessary. Senn's test, with the state of the temperature and pulse, will enable the surgeon in most instances to arrive at a correct opinion.

Dr. D. W. Yandell thought the question still *sub judice*. It can not be settled until we are in possession of more abundant statistics. There are those who hold that all cut and shot wounds of the abdomen are fit cases for laparotomy. There are those who say, wait for symptoms. Individual cases are delusive, but we should make a distinction between stab and shot wounds. In this part of the world shot wounds are more likely to injure important organs than knife wounds, because the latter are usually

made by jack-or pen-knives which have short blades. In southern countries, where the long dirk is a common weapon, dangerous wounds are made. Here a slash or long cut is usually made. There the wound is a deep stab. Senn's test being tried, there must be found many cut wounds of the abdomen in which laparotomy is not necessary: I would say: First try Senn's test; if negative, wait. But in shot wounds, despite Senn's test being negative, vessels are often wounded and other damage done which may necessitate an immediate laparotomy. If I were myself shot in the abdomen, I would call for a laparotomy without delay. There is a disposition now to call a halt in indiscriminate laparotomy. Not every man at the cross roads can do it well.

Dr. Vance wished to put on record a case of gunshot wound seen secondarily. The patient was a countryman, shot through the belly; the wound of entrance was at the upper border of the ileum, to the left of the spine. A probe passed in the direction of the wound of exit, which was just below the umbilicus. The probe entered to a distance of four inches. Patient had been shot six weeks before. He was emaciated, but walking about. The ball probably did not enter the abdomen.

Dr. Roberts reported a case of tetanus successfully treated. The patient had a lacerated wound of two fingers, received while railroad-ing. It was dressed antiseptically after a space of two hours. Tetanus appeared in seven days. Potassium bromide, 40 grains, and chloral hydrate, 20 grains, were given every two hours until sleep was induced, after which the frequency of the dose was regulated by the symptoms. He was relieved in three weeks. Trismus and opisthotonus were both well marked.

Dr. Yandell said those cases in which tetanus comes on after the seventh day are the cases that got well. Every day after increases the chance for recovery.

The essay of the evening was read by Dr. W. O. Roberts; subject, "Six Cases of Empyema." (See page 13.)

DISCUSSION.

Dr. Vance had operated but once for empyema. The patient was a man forty years of

age. The doctor resected the seventh rib on the right side, and permitted a large quantity of pus to flow out. The patient made a rapid recovery. In four weeks from the day of operation he was driving a street car. There was no subsequent sinking of the chest.

Dr. W. L. Rodman had seen five cases of empyema, upon three of which he had operated. The oldest patient was a man of fifty-five years; the youngest a child of seven years. Four of the five had the effusion on the left side. Of this number there was but one fatal case; in this the effusion was circumscribed and broke into the lung. In all these cases the pleural cavity was washed out with chloride of zinc after the following formula: Zinc chloride (official solution), 10 gts.; water, a teacupful. This when increased to fifteen or twenty drops causes some pain. In the opinion of the speaker it is the best antiseptic for this situation.

Dr. Cartledge had seen six cases. In four of which resection of the rib was done. Two were treated by aspiration; of these one died. In one only was the disease found on the right side. The patient was an old woman. The disease was chronic. There was marked contraction of the chest, and the ribs overlapped. The eighth rib was resected and the cavity evacuated and cleansed. The patient got well. The second was in the person of a strumous boy. It was a case of pleurisy followed by empyema. There were sinuses filled with pus. The patient had hectic, and was much emaciated. He seemed nearly dead at the time of the operation. The speaker resected a rib and removed the pus. Recovery was complete. In another the pus was encysted and the cavity communicated with the lung. The patient expectorated fetid pus. There was septic infection. The speaker operated by resection. The patient died. Another case was seen to-day. The patient is a woman. She had, on the 29th of last July, an attack of pleurisy followed by an ischio-rectal abscess of large size. Later there was great distension of the chest on the left side; aspiration at the seventh intercostal space brought away plenty of matter. The speaker cut down on the seventh rib and resected it at once. A gallon of pus escaped.

A tube was inserted. The case made slow progress. The tube was removed and the wound healed; but at intervals it would break open, and there would be a discharge of sero-pus. The patient complained of pain in the left shoulder blade. The lung had not expanded; the chest was still flat. The speaker reopened the wound, took out two inches of the rib, carried two fingers into the cavity, and broke down a number of adventitious bands. This procedure gave rise to some hemorrhage, but it enabled the surgeon to get rid of considerable foul pus and to thoroughly wash out the pleural cavity. A flexible silver tube was introduced. The cavity was scraped out, not washed out. Double resection, breaking up adhesions, and getting rid of isolated pus cavities did the work. The lung expanded. The patient made a complete recovery. The speaker does not favor the washing out of the cavity. It is possible that a primary washing may do good, but the daily washing is pernicious. A tube may be inserted for complete drainage, but it is advisable to guard the cavity against the entrance of air as much as may be possible. The German opinion on this subject is well founded.

Dr. Yandell said an interesting feature in the report is that all cases of pulmonary fistula did, and no other. He thinks that with reference to aspiration we are in the transition stage. He has seen a great number of cases. There have been many changes in practice since Bowditch wrote his famous paper on this topic. The speaker mentioned two cases only: One, an army officer who was struck by a minie ball in the chest during the war. He was left for dead on the field, but was picked up next morning. Hemorrhage was then very great. Suppuration set in with enormous flow of pus. This was in 1864. I saw him in 1866. He was a shadow. He had a harassing cough. There were present all symptoms of copious suppuration and a very offensive odor—four openings had closed. There was one opening at the left of the sternum, and one a little way beyond. By closing one with the finger the patient could expel pus a distance of four feet. Four of the ribs were matted together below the heart. I removed portions of three, making an opening large enough to introduce the hand. I touched the

heart. I swept out the bottom of the cavity and brought out chips of lead, a bit of serge, and several strips of his overcoat. Recovery was perfect. The man is living to-day. I made this large opening because of experience in a case in 1850. A doctor was thrown from a horse, injuring the fifth and sixth ribs. This was followed by pleurisy, empyema, abscess, and fistula. Two ribs were matted together. I removed a small portion and trusted to washing out the cavity. I lost sight of the case. The patient died. At the autopsy there was found nearly a tablespoonful of exfoliated bone at the base of the cavity. I determined then that thereafter I would make an opening large enough to cleanse and drain freely, and to trephine whenever the ribs were matted together so that the wound could not close. If the opening is low enough down and large enough, it is not necessary to irrigate. Warren Stone insisted in such cases that the opening should be so large that every thing could run out. Where drainage is incomplete irrigation is necessary. I do not think we can keep out air, nor that it is necessary when the cavity has once developed pus. All old plans to prevent its entrance failed. Some would filter the air through cotton. I think well of the chloride of zinc. It is not possible to render the cavity aseptic. Prevent ingress of germs as far as you can; but to do so effectually in these cases is an impossibility. Whenever I have had large openings and adequate drainage the cases have done uninterruptedly well.

E. R. PALMER, M. D.,

Secretary.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

Stated Meetings June 10 and 24, 1890, W. W. Parker, M. D., President, in the chair.

Dr. J. N. Upshur reported a peculiar case of indigestion in a lady of fifty-four years, very much "run down" from mental and physical overwork.

The peculiar feature was a severe pain, spasmodic in character, occurring periodically about every ten days. Its seat was about the pylorus and downward and to right along the edge of the ribs.

When the doctor first saw her she had three of these attacks at intervals of about twelve hours. The first he relieved in a few hours with morphia and atropia hypodermically, the two last with $\frac{1}{30}$ grain doses of nitro-glycerine, administering it twice for the second and once for the third attack. No eructation of gas and water followed the last of the three, as had been the case always before. The general treatment given was a light nutritious diet, attention to bowels, and a tonic of phosphate of iron, quinine, and strychnine. She had no recurrence of the pain. Nitro-glycerine had been suggested to the doctor's mind by the fact that the pain in its acuteness resembled the spasm of angina pectoris. He had much confidence in nitro-glycerine for the relief of the edema, dyspnea, and cardiac distress of Bright's disease; had tried it with much success for the temporary relief of aggravated sciatica. Though slower in action, its effects were more permanent than nitrite of amyl.

A Sequela of La Grippe. June 24th. Dr. W. W. Parker reported the case of a robust young man afflicted with influenza a short time ago, this being accompanied by an inflammation and considerable swelling of the muscles of the neck; and this, in turn, followed by a frightful eruption of vesicular character over the whole body, very much like chicken-pox. It was particularly marked upon the hips and inner side of the thighs, where it resembled confluent smallpox. It continued ten days or two weeks, leaving extremities first and gradually. There was fever, very slight constitutional disturbance of any kind, and but little itching.

A Singular Experience with Scarlet Fever and Measles. Dr. Wm. B. Grey reported, in reference to two children affected with scarlatina (aged respectively two and four years), that just about the commencement of desquamation the older one developed the eruption of measles. In four or five days the younger did the same. Furthermore, said the doctor, about this time the father, an old man, took scarlet fever.

Hematoma Auris. Dr. Charles M. Shields reported a case of hematoma auris occurring in a lawyer of about sixty years of age, and perfectly sound in mind (the trouble very rarely appearing except in the insane).

About a month before the appearance of the growth the man had suddenly lost consciousness one day, and in falling had bruised the side of his face corresponding to the trouble. The doctor enlarged an opening found upon anterior wall of canal about one half inch from external orifice. The cavity into which it led would hold about five or six drams. The discharge was very offensive. Prescribed a wash of peroxide of hydrogen. From one Saturday night until the following evening the patient had five or six hemorrhages, losing in all about twenty or thirty ounces of blood. The only resource for perfect control of the flow was packing the cavity with cotton saturated in Monsel's solution. The doctor thought the man would recover, but with considerable scar.

Dr. M. D. Hoge reported the case of a man who, since an attack of *la grippe*, had fallen into a state of melancholia almost amounting to insanity. He suffered excessively from nervousness and an intense pain in the head, the latter being treated successfully with morphia, cocaine, and bromide of potassium. He still complained of great pain in his head, until one night he pounded himself over the head with a poker until he had peeled off a large piece of scalp, and produced enormous hemorrhage. He then felt better. Some time after the doctor found a sequestrum of bone (a portion of the external table) in the wound, which he removed, and the part began to heal beautifully. The man was very much depressed all along, and believed himself going crazy. He complained of hearing voices. The doctor reasoned him out of that state and pronounced him now on the road to recovery.

Dr. W. W. Parker thought the hearing of voices a pretty sure sign of insanity.

J. W. HENSON, M. D.,

Secretary

THE Bishop of Dutch Guiana was in Baltimore, June 22d, and said that leprosy exists to an alarming extent in Surinam. Three of the Redemptorist Fathers have been attacked by the disease, and one of them is dying of it. Rev. Charles Currier, of Boston, who has also been among the lepers, accompanies Bishop Wulfingh.

Reviews and Bibliography.

The Student's Surgery: A Multum in Parvo. By FREDERICK JAMES, Gant., F. R. C. S., Senior Surgeon to the Royal Free Hospital. 817 pp. Price, \$3.75. Philadelphia: Lea Brothers & Co. 1890.

We much doubt whether the quickest way to gain a full understanding of a subject is to study it in epitome. The increased tax imposed upon the imagination more than offsets the time expended in reading fuller and more graphic explanations, and the cost of larger works. Those, however, who like condensed work, and who have easy-working imaginations to come to their aid, can not fail to be pleased with the Student's Surgery. It is a model of condensed, pointed statement; so much so that a search for surplus words must be well-nigh a fruitless one. As it deals largely with established facts and settled principles, there is left but little room for criticism or controversy. Yet even among established procedures we wonder if there are not some that will bear reinvestigation. In this age of antiseptics must we, for instance, still burn "deep and thoroughly" every case of chancre, and even before the time of avowed antiseptics the more extensive chancroids were not burnt, and we dare say the less extensive did not need to be burned. With half a dozen dressings a day of laudanum, tannin, and claret wine, a chancre is healed in our experience, as quickly as any other sore of the same extent, and all the more quickly for not being cauterized. True, the smoking aquafortis gives the patient a higher notion of our prowess, and in the existing state of his feelings the punishment hardly responds to his self-reproach, but with all that we are willing to answer to the charge of all the heresy involved in the assertion that if only one case had been burned there had been burned one case too many. The work is from imported printed sheets, and there is a pleasant absence of any American riding on a saddle-blanket behind the English author to fame. There can be no doubt that many works relating to practices in foreign countries are in some essentials different from our own, and really need emendations

to adapt them to the customs of our people; but by all means, when American physicians want to appear as authors of books, let them write them. The typography and binding of the work are exceptionally attractive, and on the whole it will compare favorably with any work of the period before the profession. D. T. S.

Correspondence.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

In his thesis for the doctorate on the treatment of chronic adenitis and cold abscesses by injections of naphthol, etc., Lasserre points out the following inconveniences due to the treatment by etherized iodoform:

(1) Violent pain due to the sudden distension which follows the injection. This distension has sometimes produced extensive sphacelus of the skin, or it produces a compression of the neighboring organs. (2) The cure is slow, as a great interval is necessary between two successive injections, and as at least three or four injections should be practiced. (3) The danger of ether, which has often produced prolonged sleep, difficult to subdue; moreover, iodoform, in an anfractuous wound, offers dangers of iodoformic poisoning. Naphthol is inoffensive, very antiseptic, but little soluble. It is not soluble in water, and alcohol of 1 per cent, except in the proportion of 33 centigrams, 1 gram in the liter of water to which is added 50 grams of alcohol. To practice injections of naphthol, one must employ the strong solution of which Dr. Bouchard has given the following formula: Naphthol *B.*, 5 grams, alcohol at 90° 33 grams, warm distilled water *q. s.* for 100 centigrams; to be filtered warm. At the moment of practicing the injection the bottle must be immersed in boiling water. At the same time the syringe should be plunged in a hot antiseptic solution. These precautions are necessary to prevent the precipitation of the naphthol, which would block up the needle or the canula of the trocar. The pus should first be evacuated, and then the injection with the antiseptic solution should be practiced slowly.

Dr. Dupau, of Toulouse, vaunts the application of iodized cotton and compression in the treatment of orchitis. He applies the iodized cotton on the scrotum, maintained in place by the aid of a suspensory bandage, and thus immobilizes it and exercises on it a regular and continued compression. He observed that in a great number of cases where this method was employed the painful phenomena of orchitis yielded completely in from eight to twelve hours of treatment. Total cure was obtained on an average in from three to eight days, and the induration of the epididymis, which sometimes lasts a long time, had disappeared at the end of from fifteen to eighteen days. The author observes that this treatment no doubt acts by the compression, but it is also natural to admit that the slight revulsion produced on the scrotum should be taken into account as well as the properties eminently resolute of the iodine.

In a paper on the treatment of carbuncle by the applications of the tincture of iodine and the administration of this substance internally, Dr. Blanquingue, of Laon, states that he has obtained very good results from this method, which acts as a parasiticide and revulsive, and which will always obviate surgical intervention or rather an operation with the knife. To succeed, the affected region should be well cleaned, but it should not be softened by compresses or poultices; then it should be painted over in two or three layers with the tincture of iodine until the skin assumes a dark brown color. In this manner the iodine penetrates into the glandular orifices and into the pilosebaceous follicles, the epidermis soon becomes scaly, these scales are then to be removed, and a fresh layer of the tincture of iodine should be applied. If the application of the iodine be practiced early, before suppuration takes place, the latter may be prevented, or if it is produced it is ordinarily circumscribed and of short duration. It should then be touched with the tincture of iodine, after having deterged the internal surface of the small crater produced by the elimination of the core. The author administers at the same time to the patient from ten to twenty drops daily of the tincture of iodine of the French codex.

In mixing chloral with antipyrine, Dr. Bardet observed that the mixture forms an oily liquid which, decanted, deposits whitish crystals without taste or odor. To this new body, which in reality is nothing but antipyrinated chloral, the name of hypnol has been given. Dr. Bardet has established that this medicament was endowed with properties analogous to those of chloral, and it has the advantage over the latter in being tasteless and not at all caustic. Hypnol is not in reality a new medicament, as under the influence of the hydrochloric acid of the gastric juice it is decomposed into chloral and antipyrine, but it is found a practical and convenient mode of administering chloral. The author has obtained good results with this preparation in tuberculous subjects, in whom the fever diminished and sleep returned, also in patients affected with neuralgia, and in children. Hypnol contains, for one gram, 45 centigrams of chloral and 65 centigrams of antipyrine; and, curious to observe, at that dose the calming effects are as much marked as with a stronger dose of chloral. The author concludes that hypnol may be prescribed in hypodermic injections, if it be employed as soon as the oily liquid is formed by the mixture of the two substances. The author had not performed any experiments on man, but these injections practiced in rabbits were not followed by any irritating effects whatever.

Drs. Perret and Devic vaunt antipyrine in the treatment of anuresis with the idea that this malady is due to spasm and not to paralysis of the muscular fibers of the vesical sphincter. Two children were submitted to this treatment. They were affected with nocturnal incontinence of urine, and were aged respectively eleven and twelve years. For three days they had two grams of antipyrine, and during six days 3 grams of this medicament, and cure was obtained. In one of these children the classical treatment by belladonna had procured only mediocre results. The dose of antipyrine was ingested in three times during the evening and before the children were put to bed.

Dr. Dubrenil, of Saint Romain, recommends antipyrine as being a very useful hemostatic in epistaxis. For a young girl, aged twenty years, convalescent from typhoid fever, the

snuffing up of a small quantity of antipyrine suspended during three hours a nasal hemorrhage which nothing could arrest. A second dose was snuffed up, which completely arrested the hemorrhage.

In his report to the Prefect of Police on the cases of human rabies observed during the last year in the Department of the Seine, Dr. Dujardin-Beaumetz stated that six cases of rabies occurred in 1889, three of which were of persons treated at the Pasteur Institute, and three were not submitted to the anti-rabic inoculations. In these six cases the period of incubation of the malady varied between thirty days and thirteen months. The following is a statement of the non-successful cases after the Pasteurian treatment.

In 1887, persons treated, 306; deaths, 3; mortality, 0.97 per cent. In 1888, persons treated, 385; deaths, 5; mortality, 1.29 per cent. In 1889, persons treated, 236; deaths, 3; mortality, 1.27 per cent. The mortality during the same lapse of time, among those who had followed no treatment was, in 1887, 15.90 per cent; in 1888, 13.33 per cent; in 1889, 7.50 per cent. In conclusion the reporter stated that the Pasteurian treatment did not prevent the persistence of rabies.

PARIS, JUNE, 1890.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

To the condemnations of tight lacing Professor Virchow has added his strong word in a lecture on diseases of the liver. He pointed out that the outward pressure of tight lacing so surely affected the internal organs that from the shape of a liver one could determine to what period of fashion the possessor belonged. Excessive lacing caused whole portions of the liver to disappear. Others grew abnormally, causing changes of the most vital importance to the patient.

For some time attention has been drawn to disease in the lower animals coincident with diphtheria in the human subject, and reason has been found for suspecting domestic animals to be concerned in the spread of epidemics of diphtheria and other allied throat diseases. Dr.

Turner, the Hertfordshire health officer, in particular has reported on the existence of a malady of a diphtheritic nature in various of the lower animals, especially cats, and he has adduced instances in which domestic pets have been the first to suffer in localized outbreaks. Dr. Bruce Low, in reporting on an extensive epidemic of diphtheria recently, at Enfield, drew attention to the large number of cats that suffered at the time, there being an unusual mortality among them. He quoted an instance where a boy ill with diphtheria infected a cat, which in turn infected a second cat, the latter being the playfellow of four little girls who nursed it during its illness, and themselves, one and all contracted the disease, no other source of infection being discoverable. A distinct advance is now made in connection with the etiology of diphtheria. Dr. Klein, in a report contained in the volume just issued by the Medical Department of the Local Government Board for 1888, details experiments which he made on cats with human diphtheritic membrane, and gives an account of his inoculation of rodents and birds with the false membrane of the disease. In regard to these two latter the results were indefinite, but they were notable where cats were used. In fact, upon inoculation of these animals Dr. Klein has produced pathological conditions which have general similarity to those of diphtheria in the human, which are found capable of being reproduced by inoculation into other healthy cats.

The memorial to the late Father Damien, according to a resolution passed by the Executive Committee of the National Leprosy Fund, at Baron F. de Rothschild's residence, will take the form of a granite Runic cross, with medallion portrait to be placed over his grave at Molokai. The honorary secretary was instructed to arrange with the Hawaiian Government for the reception and maintenance of the memorial. Sir Somers Vine (secretary) presented audited accounts of the dinner held in January last, under the presidency of the Prince of Wales. The dinner produced a sum of £3,400. The available moneys at the disposal of the committee were reported to be about £6,000. It was resolved, on the motion of Mr. Jonathan Hutchinson, F. R. C. S., seconded by Sir

Joseph Fayrer, that a systematic preliminary investigation by correspondence should be immediately undertaken, with the object of ascertaining from the medical officers of leper establishments throughout the world, and from others in positions enabling them to assist in the inquiry, the actual conditions of leprosy at the present time.

The Lord Mayor presided at the eighty-third annual festival dinner of the City of London Truss Society. In submitting the toast of the evening, the Lord Mayor pointed out that last year the number of patients relieved amounted to 10,065. One patient on their books had been proved to be over one hundred years old. Applicants were treated who hailed from all parts of the United Kingdom, and it was a startling fact that one out of every eight members of the working classes was a sufferer from some form of rupture, and therefore the necessity for such an institution could not be gainsaid.

It is announced that a chemist has succeeded in preparing fluoroform. It is the analogue of chloroform and iodoform, the chlorine and iodine of these substances being replaced by fluorine in fluoroform. But, whereas chloroform is a liquid, and iodoform is solid at ordinary temperatures, fluoroform is a gas. It is a colorless gas having a pleasant ethereal smell, recalling that of chloroform.

There have been recently, at St. Bartholomew's Hospital, two interesting cases of ulcerative endocarditis, aneurism and amyloid degeneration. One was the case of a boy, aged fourteen, who had been under treatment in the institution for five months. At first he suffered from indefinite pains. There was a double murmur over the base of the heart, and a loud systolic murmur at the apex. Right hemiplegia set in a few weeks before death. At the autopsy vegetations were found on the mitral and aortic valves. There were infarcts in the spleen and kidneys; and the spleen, kidneys, and liver were found to be lardaceous. The other subject was a man, aged thirty-seven, who when first seen complained of sharp pain in the right groin, in which a hard swelling was found, which soon after subsided. Shortly after no pulsation could be detected in the right femoral artery. Three weeks after no pulse

could be felt at the right wrist. The patient at this time complained of considerable tenderness just above the umbilicus, where an indefinite lump could be felt. There was a double murmur to be heard over the base of the heart. The man had had rheumatic fever, and for some years had suffered from epileptic fits. During the last ten weeks of life his illness had been acute. At the *post-mortem* examination fungating vegetations were found on the aortic valves, and there were clots in the right brachial and in both femoral arteries. In the abdomen, corresponding to the tender area complained of, an aneurism of the main pancreatic artery was found, evidently of recent origin.

Under the name of diuretin, theobromin-sodio-salicylate has been introduced as a diuretic. It is reported to possess the advantage of absence of any irritating influence on the central nervous system, which results in sleeplessness. Diuretin is a white powder; it dissolves when warmed in about half its weight of water, no precipitation occurring upon cooling. A series of experiments are now being carried out with the invention at one of the hospitals.

The number of killed and wounded on railways in the United Kingdom during the year 1889 exceeds that of the year previous. There were 1,076 killed as against 905 in 1888, while the injured were 4,836 against 3,826 in the year before, an increase in the fatal injuries of 171.

The ambulance section of the Royal Military Exhibition is an interesting exhibit, the Army Medical Department showing all the forms of British ambulance. One special feature is the tracing of a wounded man from the time he is wounded until he reaches home. Each stage is illustrated by the various forms of wound-dressing equipment and field dressing. A joint aid station is maintained by the St. John Ambulance Association for the use of the public during the whole period of the exhibition; they also exhibit carriages, litters, etc., adapted equally for civil or home military purposes.

A step which marks a new departure in London municipal policy has been decided upon by the London Common Council, they having decided to proceed at once to the erection of a model common lodging house, to accommodate from 300 to 350 persons.

Abstracts and Selections.

OVARIAN HERNIE: THEIR CAUSES, SYMPTOMS, AND TREATMENT.*—(Thomas More Madden, M. D., F. R. C. S. Ed., Physician to the Hospital for Sick Children, Dublin; Obstetric Physician and Gynecologist Mater Misericordiae Hospital.) Ovarian herniae are among the most neglected, although clinically they should be included among the most important, of the troubles that come before us in gynecological practice. In the great majority of cases they occur downward into Douglas' space, and in such instances the left ovary is that most frequently displaced. The next in point of frequency of these herniae are those occurring in the inguinal regions, where they are either above Poupart's ligament or, as is more commonly the case, follow the course of the canal of Nuck downward and forward, and so present in the labia, where they may be readily recognized. In the former, or directly downward variety of displacement, the ovary may be discovered on vaginal examination in the recto-vaginal fossa as a small, oval-shaped, firm, elastic and highly sensitive tumor, bulging forward into a post-cervical *cul-de-sac*. In the larger number of cases ovarian herniae, especially those in Douglas' space, result from the *vis a tergo* of abdominal or uterine tumors, or from the tension on the appendages occasioned by displacements of the uterus.

Diagnosis. Until recently these herniae when inguinal were very generally confounded with enlarged glands; when labial, with other tumors in that situation; and when downward, with pelvic abscess and hematocele. Or, as often happens, they are mistaken for the retroflexed fundus uteri, and the patient suffering from an ovarian prolapse is vainly treated for a non-existent retroflexion or retroversion of the uterus. There can be no excuse for such errors. The sudden occurrence of the tumor, its physical character, the peculiar dull, sickening pain, and the extreme tenderness and nausea manifest on examination are sufficient to enable a correct diagnosis to be made by any competent gynecologist.

Treatment. Where the ovarian hernia takes place through either of the abdominal rings or downward into Douglas' space, it may in some instances be reduced, as any other hernia similarly situated. In the majority of cases, however, such herniae are irreducible when discovered, and must either be supported in the former case by applying a hollow truss, while in the latter case the prolapsed ovary must be re-

placed if possible, and kept in position with a peculiar form of pessary exhibited, specially devised by Dr. More Madden for the purpose, or failing this, if the symptoms be urgent the ovary must in some cases be removed.

The foregoing views are illustrated, in the paper of which this is an abstract, by the details of several instances of ovarian herniae, exemplifying the clinical history and treatment of such cases.

ON THE STRUMOUS DISEASES OF CHILDHOOD AND THEIR RELATION TO TUBERCLE.*—(Thomas More Madden, M. D., F. R. C. S. Ed.) During a long experience as physician to the first hospital for diseases of children established in Ireland, with which I have been connected since its foundation in 1872, the increasing prevalence of the strumous and tubercular diseases of childhood has been constantly brought under my clinical observation. The intimate connection and relation between these conditions was pointed out nearly a quarter of a century ago in my work on "Change of Climate," and was discussed in a paper of mine in the Transactions of the International Medical Congress of 1871, as well as last year in my article on *Puberty*, in Dr. Keating's recently published American "Cyclopaedia of Diseases of Children." I refer to these dates merely as evidence that the views embodied in the following brief recapitulation were not hastily formed nor without some experience of the subject referred to. The increasing proportion of strumous and tubercular affections which has been observed of late years in my wards in the Children's Hospital is probably largely ascribable to the faulty diathetic and hygienic management of early childhood, and to the general substitution of artificial, and in many instances very unsuitable, preserved or tinned preparations for that natural or fresh milk which in my opinion is essential for the healthy nutrition of children. As I formerly pointed out, and the observation is now more applicable than was the case ten years ago, the acute forms of tuberculosis common during childhood resemble the infective disease in their origin from a specific germ, whether generated in the body or introduced from without. The latter is probably the case in the tubercular diseases prevalent among the children of the poor, in whose dietary various forms of preserved milk foods now enter largely, as it seems difficult to conceive any certain guarantee that the cows furnishing the supply may not in some cases suffer from *perlsucht*, this disease being very prevalent and not materially

*Author's abstract of a paper read before the British Medical Association, annual meeting, Birmingham, July, 1890—Obstetric Section.

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affecting the quantity of milk. More recently Prof. Bollinger has shown that milk may prove infectious whether taken from cows suffering from general or local tuberculosis; in his experience only a few drops of undiluted milk from a tuberculous cow proved sufficient to produce miliary tuberculosis in animals. Be the pathogenesis of tuberculosis what it may, however, there can be no question as to the fact that it is most frequently developed in patients who bear in their general constitutional condition, and more especially in their glandular system, the obvious imprint of the strumous diathesis. Nor is it to be wondered at that in children, thus constitutionally enfeebled, the struggle for existence between the invading specific micro-organisms and the blood corpuscles or leucocytes should almost invariably so speedily terminate in the fatal victory of the prolific bacilli of tubercle.

THE THERAPEUTICAL VALUE OF EXALGINE. Some little time before the appearance of Professor Fraser's paper on this subject, I was shown some of Brignonnet and Naville's exalgine, and I administered some of the powdered crystals in two cases of facial neuralgia in two to four-grain doses, without any effect. Regarding the drug as valueless, I did not intend further to exhibit it. The appearance of Dr. Fraser's paper in the *Journal* of February 15th gave, however, a fresh impetus to the subject, for when so distinguished a pharmacologist and so careful an observer gave so satisfactory an account of the therapeutical value of the drug, one was compelled to doubt one's own conclusions. The general verdict recorded in the *Journal* has been favorable, but my experience has not. In all my cases since Dr. Fraser's paper appeared I have given the drug dissolved in weak spirit. I shall particularize three cases.

1. A lady, aged thirty-nine, had for long suffered from neuralgia, chiefly of the fifth and intercostal nerves. She was well acquainted with the action of various anti-neuralgic drugs, obtaining most relief from ten-grain doses of butyl chloral hydrate, repeated in two or three hours if required. This patient, during a severe attack of neuralgia, began with two grains of exalgine, and was told to take one grain every hour until relieved. She found no relief from thirty-six hours of this treatment, and then after two ten-grain doses of butyl chloral hydrate, with two hours between, fell asleep, waking much relieved. A few days afterward another attack occurred, on which occasion the doses of exalgine were doubled. She thought after seven hours' continuance of these doses there was some relief, but returned with more decided benefit to the butyl chloral hydrate.

2. A lady suffering from chronic oöphoritis with exacerbatations at the menstrual period, for the relief of which she usually took in solution $\frac{1}{16}$ grain of hydrochlorate of morphine every hour or two until relieved, had four grains of exalgine given instead, with two grains every hour afterward for three hours. At the end of this this time, being no freer from pain, she returned with benefit to the morphine solution. On a subsequent occasion I gave her eight grains of exalgine in one dose; she stated this gave her some relief, but only very little.

3. An old gentleman suffering from sciatica, for which I usually gave him $\frac{1}{2}$ grain of morphine hydrochlorate in solution, and half this quantity three or four times daily until relieved, was much interested in the new analgesic. He carefully took it in one, two, three, or four-grain doses every hour for three or four hours, but could obtain no relief, and returned to the morphine. The experiment was repeated with the same result on four occasions.

The above three cases are patients on whose observations I could rely. I have notes of having given the drug in twenty-four other cases of various forms of neuralgia. In some of these, especially where toothache prevailed, some slight benefit was obtained. In most of these twenty-four cases three to five-grain doses were administered. Some of them were cases of influenza; in these exalgine failed, while antipyrin did not.

My experience of exalgine is such, therefore, that I can not regard its addition to our therapeutical resources of any moment. — *G. Armstrong Atkinson, M. D., Brit. Med. Jour.*

THE KOLA NUT.—An editorial note in the *Medical Press*, May 14, 1890, states that Professor Heckel, of Marseilles, has long made that peculiar African nut, the kola, a special study as regards its physiological effects. On April 8th, he communicated the outcome of his experiments to the *Académie de Médecine* of Paris, through M. Rochard, who read the paper. The kola nut not only contains a small portion of caffeine—the active principle of tea, coffee, and other similar drugs—but also several other alkaloidal bases. But these latter have not yet been so perfectly defined as has been the case with caffeine. M. Heckel has subjected the nut to an elaborate process of exhaustion with chloroform, whereby all the caffeine was extracted, and yet there remained a somewhat complex alkaloidal and tannic substance which proved very active. M. Heckel has separated this basis, and calls it "rouge de kola." Like the red basis of cinchona, this substance seems to have a powerful effect on the muscles. M. Heckel is strongly inclined

to attribute the effects of the kola nut to this "rouge de kola," as he does not think the proportion of caffeine it contains sufficient to account for the marvelous results obtained; and, moreover, it must not be forgotten that these effects are still observed after all the caffeine has been carefully removed. M. Heckel has tried his experiments upon army men. On one occasion the colonel commanding the 106th Regiment, in garrison at Perpignan, took a small quantity of kola-nut powder (containing only about 0 gr. 12 of caffeine), and yet he was able to take a long walk, making the ascension of the Carrigon, a mountain over 9,000 feet in height, all in twelve hours, with only twenty-five minutes rest, and finished up his march in splendid style and without fatigue. Numerous other instances are on record where officers and men have performed arduous forced marches, without being in any way incommoded, upon a small pinch of kola-nut powder, such as would contain only about 0 gr. 15 of caffeine. The fresh nut, which is only chewed by the natives of Africa, also contains a rich oil; it is of an essential character, and is very active in exciting the nervous system. This essential oil, however, must be eliminated when the nut is used as an element of diet. It is in form of a dry powder, or as a cake that M. Heckel has introduced it to the army and Alpine clubs. Many of the Alpine clubs, it is alleged, have generally adopted the kola nut as one of the principal items for a touring outfit, and find that they are thereby enabled to perform far more work with much less fatigue, and also escape all sensation of giddiness. M. Heckel is anxious that the kola nut should now be regularly adopted in the French army, not only for the men, but for the horses. He points out that the German military authorities are making experiments in this way. M. Colin and other members of the Académie de Médecine are, however, of opinion that caffeine is a much safer substance to work with, more especially as the active principles of the kola nut are but ill-defined, little known to any of them, and their action scarcely understood with sufficient accuracy.—*Med. and Surg. Reporter*.

OLEORESIN PEPONIS.—Louis Augustus Minner, Ph. G., in an inaugural essay, of which an abstract appears in the *Amer. Journal of Pharmacy*, June, 1890, describes a test of two samples of oil of pumpkin seed procured, one each from New York and Philadelphia. They were of a pale yellow color and became semi-solid at 32° F. One sample had considerable of a deposit resembling lard in color and consistency, and was rather freely soluble in alcohol. Both oils were administered for tænia,

in the form of emulsion and in doses of half an ounce, followed by a dose of castor oil, without expelling the tape-worm. He found, however, that the same quantity of the oleoresin of pumpkin seed promptly ejected large portions of the tænia.

For preparing this oleoresin the seeds were reduced to a coarse powder by triturating them in a mortar with pumice stone, exhausting with ether by maceration and percolation, and evaporating the solvent at a gentle heat. After washing the oil with some alcohol it formed a thick liquid of a red color, had a peculiar unpleasant odor and a disagreeable, rank taste. Its specific gravity at 60° F. is about 0.924. It is almost insoluble in alcohol, soluble in chloroform, ether, benzine, and benzol, and does not congeal at 32° F. Strong sulphuric acid changes the color to green, then dark green, and after several hours to a dull red-brown, a blackish deposit being also formed. Strong nitric acid changes to red-brown, and after about five minutes causes violent effervescence, a disagreeable odor being given off, and, after cooling, a reddish-brown semi-solid mass is left.

Pumpkin seeds are not as frequently used as they would be if they could be administered in a more convenient form. The introduction of a reliable preparation seems desirable, and, in Mr. Minner's opinion, the oleoresin is both a convenient and elegant as well as effective preparation. It can be easily and readily prepared, and is probably the most concentrated liquid form of pumpkin seed that can be devised. It may be given in doses of $\frac{1}{2}$ to $1\frac{1}{2}$ fluid ounce, in the form of an emulsion flavored with aromatics.—*Ibid*.

COLLAPSE FOLLOWING THE INTERNAL ADMINISTRATION OF SALICYLATE OF SODIUM.—But few drugs, old or new, have escaped trial in the special treatment of chronic and subacute articular rheumatism. The effect of the salicylate of sodium (as sometimes prepared) in the following two cases is interesting in view of certain recent experiments.

J. M. had been under treatment for subacute rheumatism for six months, in another part of the country, without deriving any benefit. On May 1, 1889, I prescribed for her 100 grains daily of salicylate of sodium. On the 4th she complained of giddiness, confusion of ideas, and weakness. On the 5th the giddiness was excessive and the patient was unable to get out of bed. The next day, having now taken 600 grains, there were delirium and prostration. The drug was now stopped, and when the patient regained her faculties the joint symptoms had disappeared, and did not return.

H. C. had for years suffered from articular rheumatism, chiefly in the lower extremities. On May 24, 1889, I prescribed 100 grains daily of the salicylate of sodium, which was supplied by the same chemists as in the previous case. On May 30th I was summoned at midnight to the patient, who was said to be dying. Briefly stated, his symptoms were, great and stridulous dyspnea, extreme slowness of the pulse, and general paralysis, the patient being unable to speak. Delirium was not so marked, however, as in the other case. After appropriate treatment he recovered, and his malady was considerably relieved for a time.

I think it worth while notifying these cases, as the symptoms present such a striking similarity to those experimentally induced in the rabbit by Professor Charteris, recently described in the *Lancet* and elsewhere. It was shown in these experiments that an element of high toxicity could be isolated from the artificial compounds commonly in use. Professor Charteris has kindly given me further information on the matter, and has shown me various specimens of the purified drug. Since then I have had opportunities of witnessing the exhibition of much larger doses of the drug so purified, without any untoward results.—*Dr. A. G. Auld, London Lancet.*

MORPHINE AS AN ANTIDOTE TO ATROPINE. A case of considerable interest occurred at Chadarghat in Hyderabad recently, and is reported in the Medical Record of Calcutta. A medical student, who was a great sufferer from neuralgia, for which he was accustomed to take antipyrin, went to indulge in his customary dose, but hit upon the wrong bottle and took six grains of atropine instead. In a few moments he became unconscious and fell. He was seen by a brother medical student, who instantly ran off and called Surgeon-Major Edward Lawrie. An emetic was speedily given, and the stomach pump used to wash out the contents of the stomach. The patient, however, seemed to be rapidly sinking from the effects of the drug. The pupils were dilated to their fullest extent, there were foaming at the mouth, stertorous respiration, and a rapid intermitting pulse. The condition seemed hastening toward the end, when Dr. Lawrie thought he would resort to the antagonistic effects of morphine, and injected one grain of this drug subcutaneously, with no apparent effect. He then injected another grain, but with no decided result. The patient, though still alive, seemed hovering in the balance between life and death. From eight o'clock in the morning till three in the afternoon artificial respiration was resorted to with varying intervals of rest.

Lawrie now determined to try the hypodermic injection of a third of a grain of morphine, and this seemed to be the determining antidote, for in an hour the pulse improved, the breathing gradually resumed its normal standard, and consciousness returned.—*London Lancet.*

BLADDER WOUNDED BY A DECAPITATING HOOK.—Dr. Berczeller, of Buda-Pesth, has related a case of some interest to all who have to conduct labors under difficulties. A note of his observation is contained in the *Centralblatt f. Gynäk.*, No. 18, 1890. He undertook decapitation in a case where delivery could not be otherwise effected; the presentation was transverse. Just as he had completed the severance of the head the bed broke down, and the end of the decapitating hook went clean through the anterior vaginal wall into the bladder. The wound was at once sewn up with two sutures, and a catheter retained in the bladder; it fell out on the following day. On the tenth day the sutures were removed. As the wound was a clean cut it might naturally be expected that it would heal more satisfactorily than the pared edges of a vesico-vaginal fistula caused by sloughing a portion of the anterior vaginal wall through pressure of the fetal head arrested for a protracted period in the pelvis. Dr. Berczeller's case also illustrates a more obvious fact. The obstetrician must be sure that, before he attempts any operation or operations, the bed or table on which the patient lies is thoroughly secure. This precaution is especially to be remembered in country practice.—*British Medical Journal.*

WHEN IS A CHILD VIABLE?—It is usually stated that children born before the seventh lunar month are incapable of living, and Voigt mentions 1,500 grams, or 47 ounces, as being the minimum weight of a viable child. Exceptions, however, occasionally occur. One such has recently been reported by Dr. Holowko, assistant physician in the Dorpat Obstetric Clinic. A female child was born in the twenty-seventh week, and weighed only 1,300 grams, or 31 ounces. Though it had to be subjected to Schultz's swinging movements in order to get it to breathe, it was ultimately brought into very good condition, and after a time attained the weight it would have done had it remained *in utero* its full time. It was kept in a kind of *couvercle*, and fed by a wet nurse, and with milk diluted with four parts of water. Dr. Holowko thinks that the formation of the chest and general muscular development are of more importance for prognosis in such cases than the body weight.—*London Lancet.*

The American Practitioner and News

"NEC TENUI PENNÄ."

Vol. X.

SATURDAY, JULY 5, 1890.

No. 1.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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THE TABLES TURNED.

The Brooklyn Medical Journal treats its readers to a startling little piece of medical jurisprudence. The case is as follows:

Dr. Cruikshank was called to see a sick child whose father's name was Gordon. The doctor made a diagnosis of malaria and treated the child accordingly. The patient did not improve as fast as the family expected, and another doctor was called.

Dr. Cruikshank took his discharge very philosophically, until it came to his ear that Mr. Gordon had said: "He treated my child for malaria when it had another and entirely different disease. He nearly killed my child, and would have killed it if another doctor had not been called in."

This was too much for Dr. Cruikshank's equilibrium, and he speedily brought suit for slander with claim for indemnity.

"The jury rendered a verdict for the plaintiff for \$1,600 damages, which was confirmed by each successive court, and finally by the Supreme Court of the State of New York. In addition to the specific charge, the slanderer repeatedly stated that the doctor was generally incompetent as a physician. The most important point reached by the decision was, that the

physician need not prove the damages sustained, as that would be impossible, but, the slanderous language being uttered, the damage resulting therefrom may be assumed."

Suits against the doctor by Smith, Jones, or Robinson for malpractice are always coming up sporadically here and there, while at times the evil becomes epidemic, and sweeps over some State or region like yellow fever or the plague. But these cases, founded, as most of them are, in malice or covetousness, and nullified as is common by the failure of the evidence to hold together in open court, no longer interest us.

When, however, a physician goes into court to indemnify himself of damaging criticism made upon his professional character and management of a case, and gets a verdict of such cohesive strength that it can successfully stand the testing of the lower and higher courts, the case is one that may not be lightly passed over.

That Dr. Cruikshank had a grievance need not be doubted. That it is a common grievance every good practitioner of medicine knows. But if the amenities of professional life are in New York what they are in other parts of the world, we will wager ten to one on it that the real offender was that "other doctor," and that the defendant did no more than indiscreetly repeat or paraphrase words fitly spoken at a time most unfit for the reputation of the first doctor in the case.

Be this as it may, neither sixteen hundred nor any other number of dollars can pay a physician for loss in professional reputation. If the sifting of this matter in court had led to the verification of Dr. Cruikshank's diagnosis and established the correctness of his treatment, an approximative vindication might have been reached; but a damage of one cent and costs is all that the plaintiff in even such a case could afford to receive.

The office of the true physician is priestly, not commercial. Such a man must needs suffer in purse and in fame at the hands of those who, having an eye to business, enlarge themselves at his expense; but the remedy is worth, work, and long-suffering, and no substitute for these can be had of the courts, however liberally they may dispense justice.

THE INCOMPATIBILITIES OF ANTI-PYRINE.

The Pharmaceutical Era calls attention to a paper recently read before the London Chemical Assistants' Association, which gives the following imposing list of incompatibles for the very much used and abused drug, antipyrine. It should be duly pondered in all its sublime proportions by the practical physician.

Acid carbolic, strong solutions, a precipitate; acid hydrocyanic dilute, yellow coloration; acid nitric dilute, faint yellow coloration; acid tannic, insoluble white precipitate; alum (ammonia), deep yellow coloration, fading and precipitating; amyl nitrite (acid), green coloration; chloral hydrate, strong solution gave a precipitate, with weak solutions no apparent change; copper sulphate, green coloration; decoction of cinchona bark, precipitate; extract (fluid) of cinchona bark, precipitate; glycerine of carbolic acid, precipitate; glycerine of tannic acid, precipitate; infusion of cinchona bark, precipitate; infusion of barberry leaves, precipitate; infusion (acid) of roses, precipitate; iron sulphate, brownish yellow coloration, deposit, on standing solution turns red; mercury perchloride, white precipitate, soluble in excess of water; solution of arsenic and mercury iodides, dense white precipitate; solution of iron perchloride, blood-red coloration; solution of iron permanganate, blood-red coloration; solution of permanganate of potassium, reduction quickly takes place; soda salicylate (solid), becomes liquid; spirit nitrous ether (acid), green coloration; syrup of iodide of iron, reddish brown coloration; tincture of cinchona bark (simple and compound), precipitates; tincture of perchloride, red coloration; tincture of galls, precipitate; tincture of iodine, precipitate; tincture of kino, precipitate; tincture of larch, precipitate.

In view of the above, it is interesting to note how often the drug may be given or taken under conditions which must very much retard its action or render it totally inert. That some of the products of these incompatibilities are poisonous there can be little doubt, and in this may be found the solution of the puzzle of

its strange and sometimes fatal effects. That such a drug should become a common domestic remedy is one of the appalling facts of this wonderful era.

KENTUCKY PIONEERS IN SURGERY.

The President's address before the American Surgical Association appears in full text in this issue. We promised it to our readers some weeks ago, but the illness of the author, with the undue pressure upon our columns of State Society matter, made the delay in its publication unavoidable. In the opinion of the junior editor of this journal, no apology is here in place, since the address is a piece of classic historical work which can not but interest the doctor at any time.

Notes and Queries.

INGERSOLL ON VIVISECTION.—Colonel Ingersoll's large capacities for unbelief have taken in the practice of vivisection, which he recently places in the same category with Moses and the Prophets. In a letter to a Boston gentleman the distinguished rhetorician calls vivisectionists "scientific assassins." He asserts that human sympathy and sense of justice are higher than all discoveries and inventions; furthermore, Colonel Ingersoll, though agnostic, knows as follows:

"I know that good for the human race can never be accomplished by torture. I also know that all that has been ascertained by vivisection could have been done by the dissection of the dead, or, at least, of animals completely and perfectly under the merciful influence of ether. I know that all the torture has been useless. All the agony inflicted has simply hardened the hearts of the criminals without enlightening their minds."

The Colonel adds: "Never can I be the friend of one who vivisects his fellow creatures. I do not wish to touch his hand. When the angel of pity is driven from the heart, when the fountain of tears is dry, the soul becomes a serpent crawling in the dust of the desert."

This sounds well, although as a matter of

fact serpents do not crawl in deserts; but, ignoring this slight concession of the truths of natural history to the demands of oratory, the eloquent writer continues:

"The wretches who commit these infamous crimes pretend that they are working for the good of man, that they are actuated by philanthropy, and that their pity for the sufferings of the human race drives out all pity for the animals. They slowly torture them to death; but those who are incapable of pitying animals are, as a matter of fact, incapable of pitying men."

Now, if the "fur" be removed from all this entrancing rhetoric, we find it amounts simply to the statement that vivisectionists are all "criminals," "assassins," and "torturers," and that their work has been utterly valueless to humanity. Or, if any thing has been achieved, it might have been done in other ways.

This plain condensation of Colonel Ingersoll's long argument shows how densely and inexcusably ignorant of the whole question the new apostle of the anti-vivisectionists is.

It would be interesting, in the cause of history and ethics, to compile a list of Ingersoll's "assassins, criminals, and torturers," so-called. Chief among them, doubtless, would be William Harvey, who was, to be sure, thought in his day to have been a modest, kind, and generous man, but who begins his work announcing his great discovery, "*Ex vivorum dissectione, qualis sit cordis notus.*" Among the "torturers" and "assassins" of the last century would be Galvani, Haller, and John Hunter. The nineteenth century list would include the heretofore renowned names of Sir Charles Bell, Marshall Hall, Magendie, Bernard, and later of a dozen great men, with each of whom no taint of viciousness or personal cruelty has heretofore ever been associated. One can fancy Mr. Ingersoll refusing to shake hands with the late Professor Dalton, or the happily still living Weir Mitchell, because these amiable gentlemen were so depraved in character!

As for the question whether vivisection has been the means of securing great and useful advances in knowledge, it is settled beyond all doubt or peradventure. We have repeatedly been over the recorded list of practical discov-

eries. They are accessible to every one, and, considering this fact, it is worse than ignorance, it is a culpable kuavery, which puts forth such utterly false statements as those of Ingersoll's.

Mr. Ingersoll says "I know," but he does not know about what he writes. He has been at pains to tell the world why he is an agnostic. We can help to the solution. It is because he does not inform himself, as other and more conscientious people can and do.

The discovery of the circulation of the blood, of the functions of the spinal nerve, of the action of galvanic currents, of the localization of brain functions, the use of the ligature, the discovery of the bacterial causation of disease and the modes of prevention, the methods of inoculations against rabies and anthrax, the improvement in surgical methods, the action of many important drugs, have been learned through vivisection.

Mr. Ingersoll's specialties are, we believe, law and religion. "*Ne sutor ultra crepidam.*"—*Med. Record.*

FASHIONS AND CUSTOMS OF THE DARK CONTINENT.—There is a sad monotony in our European fashions. Even the so-called changes are often fugues on a trivial theme, or thinly-disguised variations and reproductions of forgotten trivialities. Our new communications and lively interest in the gentle inhabitants of Central Africa may suggest some startling novelties. Besides the graceful extravagances of their head-dress—which, however, hardly beat those of the seventeenth and eighteenth centuries, reconstructed for the public edification a few years since by Mr. Lewis Wingfield, and which may yet live again—there are many varieties among our new African *protégés* of the way they wear their heads. The ruling families of the Monbuttu tribe flatten their skulls so as to elongate their heads. The Bari apply pressure just in front of the ears so as to heighten the head in that place. The Beli distinguish themselves by extracting the four front teeth of the lower jaw. Then there is a variety of ways of wearing a tail, which beat the Court train of the modern beauty in simplicity and perhaps in grace. The Madi wear cotton tails, which swing when they dance.

Elsewhere a lady limits her costume to a twig arranged as a tail, and manages to seat herself at a court function with this appendage in a graceful and dignified manner without throwing it over her arm, and without the intervention of a chamberlain. In the matter of eating, they are catholic and omnivorous, and nothing comes amiss, from a banana—which furnishes food and, when fermented, drink—to a fat pig or a deceased wife's sister, who gives little trouble there to legislators. Owing to their reticence as to their burial customs—for which dark reasons are suggested—it is difficult to pursue this branch of anthropological and osteological research. It will be seen, from the graver gleanings which we publish elsewhere, that there is much to interest the physician and the anthropologist. Dr. Emin Pasha's diary is a mine of dry but instructive reading on this subject.—*Emin Pasha in Central Africa.*

A DOCTOR'S MISTAKE LEADS TO A WEDDING.—A strange case is reported from Iowa. A young woman living near Davenport, the daughter of a well-to-do farmer, was quite a belle and much sought after by the swains in the neighborhood. But there was one young man who was evidently the favorite; and though there was no actual engagement between them, it was generally understood that there would be one before long. Finally, however, the girl's mother noticed an increase in her size which led her to suspect that all was not as it should be. She charged the girl with having sustained improper relations with her admirer, but the imputation was indignantly denied. It was renewed again and again, till, though the girl continued to protest her innocence, her parents were forced by overwhelming evidence to believe that she had been deceived, and that she was attempting to deceive them. By way of setting the matter at rest, the advice of the family physician was had. He confirmed the worst fears of the parents, and the latter then insisted upon the marriage of the couple, although the man denied any wrong doing as emphatically as did the girl herself. As the months rolled by after the wedding and no change occurred in the daughter's condition, the parents began to think that possibly they

had been a little hasty in their desire to preserve their child's reputation. Another examination was made, and it was learned that the poor woman had been unjustly accused by her parents, the trouble being due to the presence of a tumor and not to that of a child. An operation was performed, and now the interested parties do not know whether to accept the marriage as a fact or to have it annulled. Doctors' mistakes are sometimes more serious in their results than this was.

PHYSICIANS FOR CORONERS.—A few weeks ago we had occasion to refer to non-medical coroners, and to the efforts made in Colorado to overcome some of the more serious defects in the administration of that office. In Illinois all the evils of the political coroner are most pronounced, and, doubtless, any effort that may be made to correct them will meet with determined opposition from the office-holding class. The laws governing coroners in Illinois are but a prototype of those in a majority of the States; only a few having so far made any effort to reform this relic of the middle ages. The Chicago Medico-Legal Society nearly two years ago appointed a committee that submitted an able report summarizing the abuses of the present system and urging the adoption of the Massachusetts law. This law in effect substitutes medical examiners, appointed by the Governor, having substantially the same powers as coroners, in that they may summon a jury to aid them in cases of suspected criminality. It, however, dispenses with the cumbersome and inefficient jury of laymen in arriving at the cause of death.

A curious reform has been adopted by the present coroner of Cook County, which is in effect a recognition of the correctness of the principle involved in the appointment of medical examiners. He has recently appointed a physician as one of his deputies; and in cases of death from unknown causes he is sent out, and makes an examination; if this reveals that death took place from natural causes, an ordinary physician's death certificate is issued. If crime is suspected he assumes the duties of a deputy coroner and empanels a jury. One

of the curious anomalies of this procedure is that he, as a witness, must administer the oath to himself, and testify as an expert regarding observations made at the *post-mortem* examination—a sort of a coronial Pooh Bah! When the case reaches the courts he again becomes a plain physician. We are informed by the coroner, through the public press, that this system works well, and results in a considerable saving to the tax payers in decreasing the number of inquests, as well as facilitating the work in the coroner's office. With such an example from a layman, should not physicians everywhere, and particularly our public health officers, take up and advocate reform in this work until every medical position is filled by a medical man!—*Journal of the American Medical Association*.

DEATH FROM CHLOROFORM.—A death from chloroform occurred at the Bootle Borough Hospital, Liverpool, April 19th, when the surgeon was proceeding to remove an adipose tumor from between the shoulders, which interfered with the patient's occupation. The victim was a barman, thirty-nine years old. He had never had any previous illness, and had undergone similar operations on two former occasions. The patient was a big, strongly-built, broad-chested man, who had a number of these adipose growths disseminated over the surface of the body. It was intended to get the patient under with chloroform, continuing the anesthesia with ether. The patient took the chloroform readily enough, and the breathing, after a little preliminary struggling, became regular. Anesthesia was complete when about two drams had been inhaled, and the patient was then turned on his side. Coincident with the first incision, however, respiration ceased and the face became cyanosed. Artificial respiration and inversion was at once resorted to, but without success. The heart is stated to have ceased beating simultaneously with the respiration. *Post-mortem* the right heart was full of blood, while the left was empty and contracted. The heart weighed fifteen ounces, and its tissues were very friable. No valvular disease was found, but there was evidence of atheroma of the aorta. There was a curious inequality of

the pupils, the right being dilated and the left contracted.—*Medical Press and Circular*.

THE DEADLY COLD BED.—A writer in *Good Housekeeping* says: "If trustworthy statistics could be had of the number of persons who die every year, or become permanently diseased from sleeping in damp or cold beds, they would probably be astonishing and appalling. It is a peril that constantly besets traveling men, and if they are wise, they will invariably insist on having their beds aired and dried, even at the risk of causing much trouble to their landlords. But the peril resides in the home, and the cold 'spare room' has slain its thousands of hapless guests, and will go on with its slaughter till people learn wisdom. Not only the guest, but the family often suffer the penalty of sleeping in cold rooms, and chilling their bodies at a time when they need all their bodily heat, by getting between cold sheets. Even in warm, summer weather, a cold, damp bed will get in its deadly work. It is a needless peril, and the neglect to provide dry rooms and beds has in it the elements of murder and suicide." *Druggists' Circular*.

REGULATION OF MEDICAL PRACTICE IN ILLINOIS.—The report of the State Board of Health of Illinois for 1889 illustrates the efficacy of its laws for the regulation of medical practice. When the law went into effect there were in the State engaged in practice 7,400 persons. Of these 3,600 were graduates from some medical college, while 3,800 were non-graduates. In other words, the graduates constituted only 48 per cent of all engaged in practice. On January 1, 1890, the percentage of non-graduates to the whole number was only nine. From 3,800 the number has been reduced to 575. The total number of physicians in the State is less now than it was twelve years ago.—*Journal of the American Medical Association*.

LATE CHILD BEARING.—Dr. E. F. Parsons, of Thompsonville, Conn., reports the case of a lady who was married at the age of fifty years, and gave birth to a female child after she was fifty-one years old.

THE BRITISH ASSOCIATION.—The programme for the coming meeting of the British Association at Leeds, over which Sir Frederick Abel, C.B., D.C.L., F.R.S., will preside, has been issued. The following are among the list of presidents of sections announced: Chemical Science, Professor T. E. Thorpe, B.Sc., Ph.D., F.R.S.; Biology, Professor A. Milnes Marshall, M.A., M.D. D.Sc., F.R.S.; Economic Science and Statistics, Professor Alfred Marshall, M.A., F.S.S.; Anthropology, Mr. John Evans, D.C.L., LL.D., V.P.R.S., Pres. S.A., F.L.S., F.G.S. The first general meeting will be held on Wednesday, September 3d, at 8 P.M., when Sir Frederick Abel will give the inaugural address, and the concluding meeting on September 10th.

BERNHARDT AND THE DOSE OF CHLORAL.—A telegram states that Sarah Bernhardt nearly killed herself recently by taking an overdose of "chloral." The overdose was 120 grains, which is really not a very dangerous dose to an adult, and especially to one accustomed to its use. A dose much above 120 grains, however, becomes most serious, and 150 grains taken at once is usually fatal. It is somewhat curious that Bernhardt should have taken exactly the maximum safe dose, and that the amount should be so carefully stated. If the dose had been much less, people would not have been interested; if it had been much more, she would not have been believed. Bernhardt is a great artist.—*Med. Record.*

HOW TO GET LODGINGS AT BERLIN.—A special committee has been formed which will furnish all desired information as to lodgings, etc., to the foreign visitors in Berlin. Inquiries should be addressed to the office of the Congress, 19 Karlstrasse, Berlin, N. W., the envelop being marked on the outside "Wohnungsangelegenheit."

JACK, THE INK SLINGER.—A curious form of monomania has appeared in the city here recently. A quiet and apparently respectable married man developed a fondness for throwing ink on women's dresses, particularly on pretty dresses. He would follow his victim

along the street, and when a favorable opportunity arrived throw the ink, which was concealed in a pipe, upon the dress. More than fifty cases of spoiled dresses were reported before the man was discovered. He was promptly condemned to six months in the penitentiary. He is a monomaniac.—*Med. Record.*

SWEATING FEET.—The National Druggist, May, 1890, gives the following formula for perspiring feet, which is claimed to be most efficacious:

Perchloride of iron..... 5 iii;

Glycerin..... f 5 i;

Essence of bergamot..... f 5 ii.

M. Sig: Apply with pencil or swab.

DR. HELEN L. WEBSTER, of Lynn, who has recently been lecturing at Bernard College, and who has been called to a chair at Vassar, is one of the three women in America who have received the degree of Ph. D., "*summa cum laude*," from the University of Zurich.—*Med. Record.*

CASE OF INCLUDED FETATION.—Much has recently been published in the Transactions of the Pathological, Obstetrical, and other societies concerning these forms of monstrosity which throw the most light on normal embryonic development, such as acardiacus, and particularly parasitic fetus and included fetation. M. Kolisko has described, at a meeting of one of the Viennese societies, the case of an infant which had a fluctuating tumor in the right half of the abdomen. On tapping, about a pint of brown fluid escaped, containing great quantities of squamous epithelium. The infant died, hardly two months old, from gastritis. At the necropsy a cyst was found above the peritoneum, which it pushed downward. The cyst contained fetal rudiments, not anatomically amorphous, as in dermoid tumors, but with hands, face, and tongue. Such a cyst must be reckoned as a true teratoma—an extreme form of condition which, in a less developed type, constitutes the parasitic fetus, such as was seen in the case of "Laloo," exhibited a few years since before the Pathological Society.—*British Medical Journal.*

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., JULY 19, 1890

No. 2.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

CONTAGIUM OF PUERPERAL FEVER.*

BY T. L. M'DERMOTT, M. D.

I have concluded that some personal reminiscences on this much-written subject might be of some little interest, and by a comparison with the experiences of other members who may have encountered this terrible affliction of the parturient state result in some general information that would benefit all. First, that it might settle the danger and method of its conveyance, and, secondly, set forth the conditions that militated against the further accouchement of lying-in women during our attendance upon septicemia. I confess that it was with great fear and a feeling of almost superhuman responsibility that I encountered the disease under these circumstances, and then only from the fact that I was emboldened to the feat through the advice of authors and by the counsel of a gynecologist, after thorough antisepsis. Greatly to my delight, nothing unfavorable occurred during or after my conduct of the two cases of puerperal septicemia which I will report to night, and which have evoked this paper. With a consciousness of the disaster which might have been worked through the subtlety of this masked agent, I have sometimes felt that accoucheurs are not as keenly sensitive as the gravity of the occasion demands, and many times (especially is this true of midwives) they go on in their desolating ways, either unaware of the destruc-

tion they have dealt, or unwilling through mercenary motives to desist from what, under such motives, might be called a crime.

I am compelled to say, however, in defense of many noble and laudable men, that if the poison has been communicated through their agency, its ravages were manifested before they themselves were aware of its existence or potency, and they subsequently avoided sedulously and unbestitately the confines of a realm that others tread without fear or scruple. Of course, until it is mathematically determined what are the sources, methods, and absolute means by which the contagium is propagated, much latitude is left the practitioner upon which he may safely trespass, and with that guarantee of safety which comes from non-inoculation it becomes a paramount duty with our profession to minimize the danger by discovering indubitably, if possible, its absolute causation. I believe that, by frank correspondence among the guild, in the candid report of such cases as have been under their observation, we are to find the solution of this problem as much as from the fixed laws that obtain from the researches developed by both pathology and microscopy. Writers differ greatly on this important question, and there is much left unwritten on this occult and insidious foe. I can not, however, fail here to enter a protest against the much prevalent usage, even among ourselves, of attributing rashly to the attending doctor the causation of a disorder which may have found an origin outside of the attendant. Such teachings to the laity can not fail to do the greatest harm, both to the innocent accoucheur and the petulant public with whom he has to deal. It is certainly a great wrong to educate the people to believe, which is somewhat the trend in later days, that to the obstetrician alone be-

*Read before the Louisville Medico-Chirurgical Society, March 14, 1890.

longs the entire responsibility for the occurrence of a disease that has so many causes. It is now generally accepted, I believe, that the disease is either auto-inoculable from the infected organism itself or is introduced by external infection. It thus becomes, in a great majority of cases at least, impossible to be positive as to the true source of infection. Where the matter has been determined beyond peradventure, by a succession of a few or several cases, that the propagation has been immediate, through the agency of the accoucheur, he should at once desist from further obstetric work. Schroeder possibly defines it best when he says that puerperal fever is nothing but poisoning with septic matter from the genital organs. He admits nothing specific in its character, and classifies it in the same category as erysipelas, pyemia, ichorrhemia, and septicemia. So that the disease is only distinct in the fact of its connection with the puerperal state, although it has occurred after gynecological operations. Its non-specific character is also shown by the fact that it produces phlegmonous erysipelas and ichorrhemic disturbances in nurses and the newly born child who may have been in contact with puerperal women suffering from septicemia—consequently it becomes of the greatest importance to know what diseases (and in what way) produce puerperal fever, as it is not contagious in the sense that scarlet fever, smallpox, etc., may be, although it may be transferred manually. The best authorities do not think it probable that, the *materia morbi* being an organic compound in suspension in the atmosphere, it would be communicated by casual visitors, but wholly by the touch of the infected hand. My reasons for citing these means of propagation lead me to the object of the paper, reporting two cases of septicemia which I attended during the past year; and although during that time I attended a great many parturient women, I never had a case of septicemia to follow where I alone was in attendance. A reference to my visiting list shows a call to a case of puerperal septicemia, on August 12th, that had been attended by a midwife. The patient lingered till August 26th, when she died. I was in con-

stant attendance, but, having a skillful nurse, it became necessary at no stage of the illness to resort to manual contact with the patient. She was perfectly competent to catheterize the bladder, wash the vagina, etc. I never loitered in the sick chamber, though necessarily at times detained there. I relinquished all obstetric engagements at once, and consigned all such cases to other practitioners during these two weeks. On August 23d, and again August 25th, I was hastily summoned to two patients without the knowledge of their expected confinement. In both cases delivery was so imminent it was impossible to leave, the children being delivered within a few minutes after my advent. Much to my surprise neither were infected, although I was attired in the same apparel that had been worn in the sick-room, and had used no disinfectants whatever. I refused all cases, awaiting results until three weeks later, and, emboldened by their escape, I delivered four women on September 13th and 14th, and from that time on went regularly to such calls. Dr. Anderson attended one of these with me in Parkland, a breach, Dr. Bullock another, on Eleventh street, with a prolapsed funis. None were infected, nor did I meet another case until January 16, 1890, when I found, on my arrival, that the labor had been completed, the doctor, who had been hastily summoned, reaching the patient only in time to deliver the placenta. As he was leaving when I arrived, by request I called the next day, but finding every thing all right told them I should not return. I made no examination of the case manually at either visit. In three days she developed a violent septicemia, and died nine days later, January 25th. Her married sister, who was expected to be confined one month later, was in constant attendance at her bedside, although warned to leave. Unfortunately her membranes were ruptured in the sick room of her sister, and she was removed and attended by the same doctor who had delivered the sick one. There was some fever in her case a few days later, but it rapidly subsided, as he told me, and she recovered from her confinement without any further trouble. On January 18th I attended a case, and another on the 19th of

the month, although she had developed fever the night of the 18th, not knowing at that early time the nature of the case. In neither case was there the slightest deviation from a typically pleasant accouchement. Again, on the 28th, then on February 2d, February 3d, February 4th, February 5th, February 10th, February 14th, February 16th, February 23d, February 24th, I attended successively, and without any infection, making a total of twelve cases taken from my book during the month without any inoculation. I had washed my hands carefully several times in that interim with a solution of the bichloride, bathed often, and changed my clothing. In the first case the disease was in full possession when I came upon the field. In the second another physician had attended the woman manually, I only once as a simple visitor, so that I can feel my coming had no place in its causation. Whether or not either of the others had any connection with a previous case of this kind I am uninformed. I had been in consultation previous to these cases during the past year on three separate occasions, but noticed no ill effects following them, although I attended regularly any case that came to my hands. I never handle ichorous wounds, never even open simple abscesses, and rarely touch an erysipelatous patient, so that it would be unlikely I could communicate the infection in that manner. I have noticed frequently, however, that synchronous with the endemic development of puerperal septicemia we find the greatest prevalence of erysipelas, diphtheria, etc., in the same localities; and in this connection we may ask whether telluric disturbances play any part in the propagation of this disease, as they do in the others. I would also like to strengthen my belief that auto-inoculation from atmospheric infection is the chiefest factor in its production, as we find the disease most violent in infected hospital wards and at certain periods, and also that where developed by the accoucheur it occurs in interrupted cases, one only possibly out of several continuous deliveries being affected in many personal instances. If such were its axioms, then would the remedies applied rob it of many of its terrors—not the least of which would be the

satisfaction to the attendant that the hand which had been invoked to succor was not the medium to destroy. I can not but feel in this connection that puerperal septicemia appeals more strongly to our humane profession than any other illness intrusted to our censorship—for if, in the history of a community, there is one person more than another that awakens in us all the grandeur of affection, it is the bright-eyed darling whose life is made brightest by the promise of a long fruition not jeopardized by the consummation of her nuptials.

LOUISVILLE. 1

A CLINICAL STUDY OF RHEUMATISM.

BY EWING MARSHALL, M. D.

Clinical Assistant to the Professor of the Principles and Practice of Medicine, University of Louisville.

In the daily clinic at the University of Louisville it has fallen to my lot to prescribe for a great many rheumatic cases, and they have been especially numerous during the last two years.

This paper is meant to call attention to some therapeutic points, and therefore I will not allude to the symptoms and signs or duration, etc., of rheumatism, but simply call attention to the effects produced by the use of different drugs.

In the acute form no other drug has given such satisfaction as is generally obtained with salicylic acid.

In the subacute variety salol often acts nicely; while, again, a combination of salicylate of sodium and acetate of potassium succeeds where the salol has seemed to fail. Generally, up to a month or so ago, I have used the salol in too small doses, and since larger ones have been used the results have been better.

In chronic rheumatism and in those migratory pains hard to classify I think we have a perfect mixture. For some time I have been watching the effects of the individual members of the mixture; first alone, then in pairs, and lastly the combination which is given below.

By the assistance of Mr. Samuel Meyer, the efficient druggist of the University Dispensary, the mixture has been relieved of most of its

disagreeable taste, and its powers really improved. The prescription is as follows:

Sodii salicylatis.....	}	āā ʒij;
Potassii iodidi		
Potassii acetatis.....		
Ext. cascara sagrada, fld.		
Glycerini.....	}	āā ʒss;
Aquæ cinnamomi.....		
Aquæ menthæ pip. q. s. ad.....ʒiij.		

M. ft. sol. Sig: teaspoonful every four hours.

It has been a clinical observation with me that the majority of chronic rheumatics are likewise the subjects of chronic constipation.

Giving but a moment's thought to the subject, one must see the advantage of this combination.

The anti-rheumatic and general alterative powers of the three first ingredients are so well known that it would be wasted time to speak of them individually, but it has seemed by combining them we obtain more than four times the effect that we generally obtain from any one of them by itself.

Now, with reference to the chronic constipation, in glycerine and cascara we have a combination producing very pleasant, gentle, but usually sufficient laxative effects.

It has been our custom to vary the amount of the cascara according to the needs of the case.

If the bowels should be very obstinate, increase the amount of the cascara, while if, on the other hand, they acted with little assistance we diminished the quantity.

A short report of one case will illustrate the subject for us.

One of the class at present attending the University consulted me some two weeks ago. He complained of chronic rheumatism, and incidentally remarked, "I have been practicing medicine for fifteen years, and in the last month or six weeks I have tried many things to relieve my trouble, but they all failed."

In a general way he stated that he took salicylic acid until he used up three hundred grains — salicin and salicylate of sodium each until he had consumed a hundred grains. Becoming anxious, he consulted me. He was put upon this mixture, and in forty eight hours began to feel benefit from it, and now at the end of two weeks he is confident that a little longer use of it will relieve him entirely.

To those laboring with any chronic rheumatism I would urge a trial of this anti-rheumatic mixture, believing it will serve them well.

LOUISVILLE.

NEW OPERATION FOR THE REPAIR OF LACERATED PERINEUM.

BY ALEXANDER DUKE, F. C. P. I.

Gynecologist Steeven's Hospital, ex-assistant Physician Rotunda Hospital, etc.

I wish to bring before the notice of my gynecological brethren an operation I have designed for the restoration of a lacerated perineum, easy of performance, and which will, when properly executed, form a good perineal floor, and I might almost say practically a new perineal body. The patient, having been prepared by the usual preliminary steps required for the old operation, when under the influence of an anesthetic, is placed in the lithotomy position, the left index finger being introduced almost its entire length into the rectum, a long straight double-edged bistoury is made to pierce the tissues in front of the anus at right angles to the vulva, and, guided by the finger in the rectum, is made to penetrate the septum for two and a half inches upward, the incision being enlarged laterally to two inches as the knife is withdrawn.

The patient is then turned on her side, and, on the points of incision being pressed together, a lozenge-shaped opening will be seen, and when all sutures required have been introduced and are properly adjusted and approximated, the two cut surfaces are brought into direct apposition. The sutures are introduced by a strong sickle-shaped needle with eye near point, mounted on a handle, strong silver wire being the suture preferred.

The needle is introduced at lower edge of incision, and, guided by a finger in the rectum, is made to travel over the cut surface to its full depth above, describing the arc of a circle: and on point of needle appearing directly opposite it is threaded with suture and drawn through. On the ends of this suture being drawn together with the fingers, a good idea can be formed of how many additional stitches may be required. When all considered necessary have been inserted and approximated, a

finger of each hand passed into rectum and vagina will at once recognize the gain in thickness of septum, the external tissue being pushed fully an inch forward from anus, and forming a thick and solid perineal body.

The incision being a deep one, on union taking place between the raw surfaces a considerable amount of support must be afforded in cases where a pessary is required, or where there is much tendency to prolapse of uterus or vaginal walls. My experience of the operation, though up to the present limited, has satisfied me with the results, and there being no loss of tissue whatever, should the operation fail, it can not add any difficulty to a subsequent one.

Even should the perineum be lacerated to the verge of anus, what I describe can be done. I find that leaving the sutures in for four days is generally sufficient; but if I am in doubt as to the union being strong, I cut the wire, but leave it *in situ* for a day or two longer, thus affording some support and relieving the strain on the edge of suture holes, and I also support the parts by long strips of adhesive plaster carried from hip to hip over the new perineum.

The wire should be stout and not too tightly twisted. My friend, Dr. More Madden, has kindly given my operation a trial, and was much pleased with the results, especially in one of his cases where the old plan of operation had been tried previously but failed, owing to the patient's poor state of health and want of healing power. The advantages of my plan of operation are briefly these:

1. The simplest of performance as yet proposed; no danger of hemorrhage, the surfaces when dry being brought together.

2. No danger of sepsis, as the incision is not open for the admission of any discharge from either vagina or rectum during the healing process.

3. No loss of tissue, and consequently no harm done should the operation fail.

DUBLIN, IRELAND.

MRS. ABBOTT, THE GEORGIA MAGNETIC WOMAN.

BY D. T. SMITH, M. D.

Lecturer on Medical Jurisprudence in University of Louisville.

The citizens of Louisville have recently had the opportunity of witnessing a series of exhibitions unique in their bearing on the accepted teaching of science in regard to the nature of force. These exhibitions were given during May and June by Mrs. R. N. Abbott, of Milledgeville, Ga., who is now on a tour among the principal cities of the country. They consist of a series of tests of remarkable powers, which it is claimed this lady possesses.

Before indulging in any comments, or attempting any explanation, I shall briefly set forth the programme of tests announced by her, and which was in every respect most faithfully carried out.

These tests were as follows:

1. A committee of ten or more well-known citizens having been selected from the audience, each member of this committee, taking firm grasp of a chair, tries to hold it still. Mrs. Abbott lays her hand on the wood and moves and tosses the holder without apparent effort.

2. She holds a chair in her open hands, and each of the committee tries in vain to push or pull it through them.

3. She stands erect on one foot, holding a billiard cue in her hands. Each member of the committee tries, by taking hold of the cue, to push her from her balance. They then try in twos, threes, and fours, without in any instance succeeding.

4. She lifts members of the committee from the floor by placing her open hands at the sides of their heads.

5. She lifts the committee singly, seated in chairs, by laying her hands against the chair posts, and without grasping them.

6. She lifts two, three, and then five men piled up on one chair, in the same manner.

7. By laying her fingers against the posts of a rocking-chair she prevents the strongest man from rocking.

8. She holds a billiard cue in her open hands while one, two, three, and four men successively are baffled in trying to push it across her hands.

STERN has collected one hundred and seventeen cases of diabetes in children, and believes the disease is not rare in early life.

9. She holds a tumbler between her hands, when a muffled, vibratory sound, about two thirds as rapid as her pulse, can be distinctly heard.

10. Each member of the committee tries to lift her from the floor, her weight being about ninety-eight pounds. This they can do by lifting immediately on laying hold of her; but, if she is held for a moment before the effort at lifting is made, they can not raise her from the stage. They then try by pairs to lift her, by threes, by fours, and even five men try to lift her by taking hold of her uncovered elbows, which are placed down by the side of her body, but invariably fail.

If a handkerchief, or clothing of any kind, is interposed between her arm and the hand of the person lifting, she is easily lifted, her peculiar force being exerted only when contact of the lifter's hands is made with her bare arms.

11. A small boy selected from the audience lays his hands on Mrs. Abbott, and thereby receives her power to such a degree that two of the strongest men can not lift him from the floor. If she puts the boy's hands in contact with each other, even while she is still holding them, the current of force is broken and he is easily lifted.

12. Each member of the committee holds a spread umbrella in his hands, she rests her fingers against the handles, and the holder is drawn or driven violently from his position.

13. A billiard cue is placed perpendicularly on the stage, and five men take hold of it to keep it down to the floor, and on top of it is placed a heavy man. Mrs. Abbott lifts the entire weight by laying her palms against the cue.

14. Mrs. Abbott places her hands against the proscenium wall or a glass window, and members of the committee try to push her body against the wall.

Two men, during the test, hold their hands between hers and the wall, and while the utmost strength of a powerful man is exerted neither is her body pushed against the wall nor is any pressure felt on the hands interposed between hers and the wall.

In a subsequent series she held an egg in

each hand and between her hand and the chair or billiard cue at which she was lifting, without the egg being broken. When she was being pushed against the proscenium wall she not only had gentlemen to put their hands beneath hers and the wall, but also had an egg placed beneath each of their hands, only asking that the tips of their fingers rest against the wall. In numerous experiments thus made only one egg was broken, and in that case the intelligent gentleman in whose hand it was held explained that his hand was resting on the egg alone and was not in contact with the wall.

These were the experiments submitted by Mrs. Abbott herself. They were closely and critically watched by a number of gentlemen composing the successive committees, amounting in all to more than fifty, and embracing many of the representative men of science and learning in the city.

There were no accessories, there were no possible accomplices; the experiments were as fairly carried out as could possibly be done.

But the exhibitions did not stop here. A number of gentlemen, among whom were Prof. E. H. Mark, Teacher of Physics in the Louisville High School, Dr. J. Lewis Howe, Scientist of the Louisville Polytechnic Institute, Dr. H. A. Cottell, Professor of Chemistry in the University of Louisville, Prof. John S. Barbour, and the writer, were permitted to form a party of investigation to visit Mrs. Abbott at the parlors of her hotel, and subject her to any test that might have a bearing on the elucidation of her peculiar powers. After having her to repeat a number of her public tests, we subjected her to a number of tests of our own suggestion. One of these was to place the ends of two silk cords in her hands, while a boy of eleven years of age held the others. His weight was found greatly increased thereby, and only a strong man could lift him from the floor. This increased resistance was marked at a distance of eight or ten feet. A boy holding the ends of two billiard cues, the opposite ends of which were held by Mrs. Abbott, was with difficulty lifted. A circle was formed with three persons on each side, between Mrs. Abbott and the same boy, joining hands. Her force

passed through the bodies of those forming the circle, so that the resistance of the boy to lifting or to being pushed from his position was markedly increased. On the other hand, a cotton cord or an iron bar conveyed no force whatever. Again, a circle of seven persons was formed, the first holding Mrs. Abbott by the hand and the last laying the end of a billiard cue on a table, when a peculiar vibratory sound could be distinctly heard in the table. Numerous other tests were made, most of which were negative.

In every test devised by the committee the readiest and fullest co-operation was given by Mrs. Abbott and her husband.

It may help the discussion of these remarkable phenomena to ascertain who the person is that thus apparently sets at naught the laws of gravity and contravenes the ordinary experiences of the operation of force, and to learn something of her history and her pretensions.

Twenty-five years ago she was born, of good parentage, in Milledgeville, Georgia. Her father, James A. Garratt, was the son of a noted Methodist preacher of the same name, and her mother a sister of Dr. Jas. H. Clouton, now of St. Louis. Her first husband was a nephew of Bishop Atticus G. Haygood.

She was a weak, sickly child, and on account of weakness of the ankles did not walk till she was four years of age, and it was then only by wearing ankle-braces that she was able to walk at all. Possibly faulty innervation had somewhat to do with it, for later on she would now and then for a moment lose the sense of feeling, "her body would become dead or go to sleep," and she would fall to the floor. Her ankles are yet weak, and only a little more than a year ago her right ankle, the one upon which she stands in her tests, gave way while walking in the streets at Jacksonville, Florida, and she fell to the ground, after which she was for some weeks incapacitated from the injuries received.

Her physician first became acquainted with her remarkable powers about the time she first began to walk. The first decided manifestation of it took place when she was about seven years old. Her father was sitting in his chair, reading, when she took hold of the posts and

said, "Take care, father, I am going to lift you," and, suiting the action to the word, she rose up with the chair, throwing her father over on the floor. On another occasion, her brother, who was reading, became annoyed at the noise she was making while lying down across the door-way, and told her that if she did not keep quiet he would put her out of doors. "You can't lift me," was the answer. "I will show you," he replied, and stooping down he took hold of her, but, try as he would, he found it impossible to lift her from the floor.

On another occasion, when she was about eleven years old, a horse of her father's happened to be stretched out, dying, in a gateway, to which a plank walk-way led up, the horse itself lying on a loose plank. Taking hold of the end of the plank upon which the weight of the horse rested, she remarked to her brother, "I believe I will lift this horse out of the way." "You think you can do wonders," replied the brother. "I can do wonders," she answered, and at once rose up with the end of the plank, and without any sense of effort moved the horse around until she stepped on to the ground, when her powers left her at once, and the plank and horse went down. That taught her that while on the ground, as far as her peculiar force was concerned, she was but as others. Chairs and tables would rise as she stood with her hands against them, but all these things were regarded by those around her as merely manifestations of superior mediumistic powers.

And she herself, though little appreciating the wonderful characteristics that distinguished her from the generality of her kind, nevertheless made repeated efforts to test the limits of her powers. She learned that her force did not avail her if she stood on the ground, or on a carpet, or on any metal, or on green wood. Resting on dry, hard wood, or, better still, on glass, she becomes "charged." Under these simple conditions her power never fails her, let the time and place and surroundings be what they may.

Nearly all her feats are performed through the medium of dry, hard wood. It is for the advantage this gives that she usually selects the billiard cue, it being made of hard wood

and reliably seasoned. This she must touch with both hands, while the person or persons who take part with her in her tests take hold also with both hands. However, in lifting a number of men piled upon two chairs, the chairs need not touch, the connection being sufficiently made through the living load they bear, and it is thus necessary only for her to lay a hand on one post of each chair. A green stick or one of soft wood does not allow her to become "charged."

In the experiment of lifting members of the committee from the stage she merely puts her hand to the side of their heads, and this, she says, she can do only when she has become "worked up." In all other cases she works effectively only by means of glass or dry, hard wood.

Her power does not extend to lifting dead matter, and not all living. Thus while she lifts horses, dogs, cats, or people, she can not lift fish. Whether this inability applies to other cold blooded animals has not yet been ascertained.

It is not necessary for the boards upon which she stands to be fastened down. At the hotel, in our tests, the boy whom she held by the hand was placed upon an ordinary lap-board, while members of the committee stood by his side on the leaf-boards of a walnut extension table, and yet could not lift him.

On three different occasions she has been struck by lightning, once having a tooth forced from its socket by the stroke. At another time a young man was killed by her side, she being severely hurt. There seems, however, nothing in this experience bearing on her present condition.

During thunder storms she says she is greatly affected, and usually, immediately after they have passed over, she is able to suspend a row of needles from her teeth as from a magnet.

She has never been able to ride horseback, horses becoming unruly whenever she makes the attempt. These attempts, however, she has never made alone, and she thinks it possible that her contact with a second person may irritate the horse. In one of her efforts to ride she was thrown to the ground and received severe hurts.

In making her tests she is not conscious of the exertion of any voluntary effort. She merely feels that the proper tension exists, and, having placed herself in the appropriate attitude, the particular act is performed. Nor is it necessary for her to be conscious at the time. At one time, when unconscious and under the influence of an opiate, her feet were placed against the bed, she was afterward told, when it was found she could not be lifted.

While "charged" in the performance of her feats, she loses nearly all sense of pain or of any bodily discomfort she may be suffering from. While making a test in a town of Virginia, a man who had made a bet that he could defeat her by distracting her attention, scratched her arm so that she still bears the scars, yet at the time she knew nothing of it, and found it out only by the blood flowing.

The tests for the public were all made on the open stage, and no pretensions whatever were made to other than natural though unknown powers.

While it is true that some of her tests are of a kind that take advantage of natural tendencies and yield the largest result for the least outlay of force, so that they may be to some extent imitated, no capable and fair-minded man with proper opportunity of observation can doubt that her exhibitions are *bona fide*, and just what they purport to be.

Yet so contradictory to all our notions of the laws of gravity and the understood operations of force are these manifestations, that, not to violate accepted and apparently settled canons of science, we have to make suppositions that are startling in their novelty and boldness.

In nearly every instance the strength exhibited by Mrs. Abbott was a manifestation of force developed in her nervous system, and operating upon and through ordinary matter. For instance, in the test of pushing, her hands did not touch, and in no case are they to touch the hand of the opposing party. Her force then seems to have acted in some way through dry wood upon the opposing party. None of the common forms of force act in this way. We can not say that it is her will, for she is conscious of no distinct effort of will, and beside, as we have seen, it operates when she is asleep.

In every class of cases, physicians and others, skeptic or not, were invited to interpose their hands between hers and the object upon which she was exerting her powers, and in no instance was pressure felt greater than the mere weight of the hand. Even where two men were trying to push a billiard cue through her hands, the writer, with many others, at different times, interposed his hands between her hands and the cue, and felt no perceptible pressure. That this was no illusion was demonstrated by interposing eggs, as already described, which remained unbroken.

Is it magnetic? We know that magnetism can oppose gravitation, but it merely overcomes it by direct resistance. Thus, a magnet placed on scales will tip the scales, with a weight of iron beneath it, as much as if the iron was placed on the scales; but in these tests gravity is apparently annihilated, or strengthened and weakened indifferently, as when the exhibitor either lifts apparently excessive weights or resists great and apparently far more than adequate efforts at lifting her or other persons held by her. She appears to multiply the force of gravity when she herself is to be lifted, and to destroy it when she lifts others. It is difficult to conceive in what way, under these circumstances, the lines of force might work, and what arrangement they would present were they visible objects.

To ascertain whether the force exerted in attempts at lifting her was resisted or absorbed and appropriated by her, the committee had two men to stand on platform scales drawing 600 pounds. Standing thus and lifting their utmost, two men, weighing together about 350 pounds, were not able to tip the beam at 600 pounds.

After the exhibition Mrs. Abbott was kind enough to give a more careful test, at which it was found that an athletic young man, weighing 175 pounds, when lifting at Mrs. Abbott, could tip the beam of the scales at only 300 pounds; whereas, when lifting at the writer with others swinging to him, the same young man would make the scales register at 400 pounds, or 225 pounds more than his own weight. That is, Mrs. Abbott had in some way caused to disappear 100 pounds of the

exerted force. But even the 125 pounds was ample to have lifted her from the floor, unless other resistance was offered in addition to her natural weight.

Yet four and even five strong men lifted at her in vain, not being able to raise her in the least. Taking this test as representative, we must conclude that at least 500 pounds were exerted on her elbows placed close at her side, and yet proved insufficient to lift her, though she stood on the bare stage with an ordinary pair of light shoes on her feet.

There seems, in this instance, no explanation of the curious fact, except the supposition that in some marvelous way her organism is endowed with the power, not only of neutralizing the force exerted by others, but of capturing their force and exerting it against them.

Yet, after all this exertion, so great if measured by the amount of resistance overcome, Mrs. Abbott appears not to be in the least exhausted. Before the beginning of the performance she sings a song, and again, near the close another, to show that in her voice at least there is no evidence of exhaustion. Indeed, on the contrary, she claims to be, and appears to be actually refreshed by the exertion, involving as it does an outlay of force to which the strongest man must be unequal.

The question naturally arises, "In what does this force consist? What is the nature of the power that enables this delicate woman, virtually an invalid, to accomplish feats of strength that seem to border on the miraculous? Is it a gift peculiar to her alone, or does it represent a power that in some form is common to all men?" The first questions have already been answered in the descriptions given. It differs from all the forms of force generally recognized. Then, is it peculiar to her? There is much reason for thinking that it is not, but is merely an exaggerated development of a power common to the race.

Physicians have come to hold there is no such thing as an absolute disease. All manifestations of disease are regarded as merely healthy processes gone astray. So all freaks and deformities are regarded as misdirected efforts on the part of nature to form normal structures.

So in this instance, and all similar ones, we may reasonably conclude that we have to do with a force widely possessed, but gone astray, or having taken a new direction in development.

In the feats of so-called spiritualists, such as moving and lifting tables, bureaus, etc., clear-thinking and entirely capable scientific men have acknowledged the observation of forces that were clearly outside of the ordinary line of natural phenomena, and the feats accomplished by the exhibitor in this case may depend upon the operation of a similar force.

Finding, then, the outcropping of a similar force in other individuals, and here a marked exhibition of it, we may with reason conclude that we have here but an exaggeration of a common endowment.

But after all, in view of every-day facts of science, need we wonder so greatly at these manifestations. Let us consider the history of an ordinary artificial steel magnet. We take a bar of steel and suspend it perpendicularly in a well. In the course of time it becomes a magnet. We now take a mass of iron and find that it is drawn to the magnet with considerable force.

Again, we may rig a small engine and set it to work drawing away the mass of iron as often as it is attracted to the magnet. This may go on for centuries, and tons upon tons of coal be consumed in enabling the engine to do what the magnet has done without any diminution of its power. The magnetic force may enter the steel at a higher potential and leave it at a lower, and between these two may be found the loss or disappearance of force equivalent to the work accomplished.

An illustrated analogy to such a phenomenon may be observed in spring time by cutting off the branches of certain trees. Water will pass up through the pores, we know not exactly how, and pouring out above give power by which delicate machinery might be run as the sap flows down. Here, seemingly, gravitation has been baffled in the procurement of this energy.

Again, from a pool scooped in the sand we might go on indefinitely dipping water. If we were as ignorant of the flow of water as we are

of magnetic force we might imagine the stock of water in the little pool to be inexhaustible, just as we imagine the stock of magnetic force in the magnet to be inexhaustible.

But whence does the magnet, whether artificial or natural, obtain the force thus to do this endless work? There occurs to me but one solution. The bar of steel has the power of absorbing force from the magnetic current that perpetually passes around the earth, and which is everywhere believed to be the cause which determines the direction of the needle to the pole.

Some startling announcements have recently been given out on the authority of eminent scientists, among them the well-known Dr. Joseph Leidy, of Philadelphia, relating to the mysterious John E. W. Keely in the matter of his famous motor.

Mr. Keely believes he has come into possession of the power of hitching on to and harnessing the magnetic earth-current, or polar current, as he calls it, and making it perform certain astonishing feats by striking particular musical chords. He claims to have become convinced that every molecule has its chord, and that every mass of molecules has its chord of the mass, and when these chords are struck by musical instruments the earth-current is diverted and set to work through them.

Of course only a cautious opinion can be ventured in the absence of more extended investigation, but we may assume that every possible chord of music has been struck again and again without such results as we can not doubt he has attained.

We may venture, then, the opinion that the force evoked by Keely is a personal force, kindred in nature to that possessed by Mrs. Abbott, and that, no matter what machinery is invented, no man will ever accomplish any thing with it in that line unless similarly gifted. It is he that hitches on and not the machinery. I regard Mrs. Abbott as possessed of gifts of a similar though far from identical character, and the so-called spiritual mediums of all ages I would place in the same category. That there are innumerable instances of table-knocking and table-moving it is not easy to see how any one can doubt who

has opportunity to observe and a mind constituted for the weighing of facts and the exercise of reason.

The pretensions to the supernatural made by spiritualists in favor of manifestations so often unintelligible, and even silly and degrading when regarded as the acts of a higher intelligence, has debarred many from investigating such phenomena; while, on the other hand, the devotees of spiritualism, actuated by a desire to have their manifestations consistent with the notion of what a higher intelligence should do, have so often been found resorting to fraud as to bring the whole matter into disrepute. In the case of Mrs. Abbott we have no such pretensions and no such aims, and we are able to observe her manifestations as we would observe any other purely scientific phenomena.

LOUISVILLE.

Societies.

ALLEGHANY COUNTY MEDICAL SOCIETY.

Special Meeting, June 17, 1890, J. A. Lippincott, M. D., President, pro tem., in the chair.

Dr. Batten reported a case of suspected volvulus. On Sunday, June 8th, I saw a man who had been suffering for several days with intense abdominal pains. There was sickness at the stomach. I gave him a quarter of a grain morphia sulphate and extract of belladonna every hour. That did not control the pain, and Dr. Pollock was called in consultation. We continued with the belladonna and the sulphate of morphia every hour, and a hypodermic injection of morphia every six hours. This quieted him. The morphia and belladonna were continued steadily, and when the pains became unbearable morphia was injected. He continued in that way, with vomiting, until Friday. I omitted to say we injected warm water into the bowels. On Friday afternoon there was a passage from the bowels, and we omitted the hypodermic injection and the morphia and belladonna, and gave him Rochelle salts in small doses. Yesterday he had three hours' sleep; last night he slept all night. To-day he is well.

Dr. Buchanan: I would like to know if any tumor could be felt.

Dr. Batten: No, but the abdomen was very hard.

Dr. Lange: I would submit that Dr. Batten has given no evidence of intussusception; it might have been a case of ileus, a case of fecal obstruction, or of typhlitis; Dr. Batten has given no evidence of volvulus.

Dr. Batten: It was an obstruction of the bowels. No hard matter came away after the bowels commenced to move.

Dr. Huselton: I would be disposed to criticize the treatment. I can not readily understand why he should resort to purgatives in such a case. Of course the opiates would be all right to allay pain and quiet the bowels. It seems to me that purgatives would hardly be proper in such cases.

Dr. Duff reported a case of puerperal convulsions. About one year ago I reported a case of puerperal convulsions to this Society. I was called to see a young woman of twenty, about two weeks before the time of labor. I found general anasarca as well as urine loaded with albumen, and I treated her, as I indicated in my report, by giving her digitalis. About six days after I was called to see her. She was taken in convulsions, which could only be controlled by chloroform. These we controlled for about twenty-four hours, when they returned. I then dilated and delivered her of a male child. The child lived about a week. The mother made a good recovery and did not have convulsions after delivery. Against my orders, she cohabited with her husband and became pregnant within three months. Before pregnancy her urine was normal. At four months I examined her and found considerable albumen. I then put her upon nitro-glycerine, one-drop doses three times a day, with the result that the albuminuria disappeared. At six months the albumen returned, as well as the dropsical condition. She was again put on nitro-glycerine, and there remained a slight trace of albumen during her whole pregnancy. She was confined last Tuesday morning; I applied the forceps, delivered her, and she has made an excellent recovery. I might follow this case with another almost similar in history,

in which nitro glycerine was used with as good results; but in a third case it did no good. Taking it all in all, however, my experience is that nitro-glycerine is one of the best remedies we can use in these circumstances.

Dr. Connell: Two such cases came under my notice. One showed about one per cent albumen; this was at the beginning of the seventh month. In about two weeks I was called to see her, in convulsions. Another case was one in which I was called by Dr. Hallock. In this case there was no albumen in the urine. The woman had reached full term and the labor progressed slowly but favorably; being first labor, of course it was a little tedious. During the second stage she was seized with a terrific convulsion; during the time we were delivering her, which we did as quickly as possible, she had three or four convulsions. There was no trace of albumen in her urine.

Dr. Stewart: Albuminuria, uremia, and convulsions during pregnancy are invariably ascribed to circulation interferences by pressure of the enlarged uterus. But it is worthy of note that abdominal tumors as large as the uterus at term, and occupying the same situation, do not entail these results. How can this be explained? It is to be remembered that pregnancy possesses other means to effect convulsions, namely, through the nervous system. In addition, discrimination is necessary, and all convulsions occurring during pregnancy, labor, and the lying-in, are by no means to be ascribed to and treated as the result of uremia.

Dr. Green: April 28th last, I was summoned to see a child six years of age, with typhoid fever. The patient remained ill with the characteristic temperature curves during twenty days. During the last six days cerebral symptoms seemed to predominate, and about the time the fever subsided and the temperature became normal the child appeared to convalesce rapidly, and seemed cheerful. On the twenty-second day, when I called they told me the child had not spoken the past night, and had spoken but once since I made my visit the day before. She continued in this mute condition for six days without uttering an audible note. During this time there did not

seem to be any unusual delirium, but about twenty four hours before she began to speak she manifested considerable delirium of rather a cheerful nature. It was on the seventh day she began again to speak, and within forty-eight hours she talked as usual. I think this case is unusual. The child made a good recovery, and is now apparently as well as before the illness.

Dr. Buchanan: I have seen a case very similar to Dr. Green's. A child seven years old was attacked by typhoid fever, and passed through a typical course of fever lasting four weeks. The child was then unable to speak. It had no other cerebral symptoms whatever. In all other respects the case was an ordinary one. It returned to speech more gradually than Dr. Green's case, but finally completely recovered. I think it was almost a week from the time it commenced to say individual words until it was able to express its wants.

Dr. Huselton: I have to report a case of dislocation of the hip-joint. The dislocation was that which is commonly known as the dorsal dislocation. The case had been seen and manipulated by another surgeon, and in the manipulation the head of the bone had slipped into the thyroid foramen, an accident which may happen to any one of us, and which is not so readily reduced. On my third effort, I succeeded in dislodging the bone, and it returned to its place with a snap so loud that I felt certain I had fractured the neck, but was glad to find that I had not. This is the third case of dislocation of the hip I have reduced by manipulation. The first one I had no difficulty with whatever. The second one I also succeeded in reducing without special effort. The patient made a quick recovery in this last case.

Dr. McCann: This is not an uncommon accident in attempting to reduce a dislocation of the hip joint; in the effort to place the head of the bone in its normal position, unless there be extreme care exercised, it will be thrown into one of the other dislocations. Some years ago a man was struck on the back by a railway train, and sustained a dislocation of the hip, as well as other injuries. When he was brought into the hospital it was not appreciated that he

was fatally injured, and an effort was made to reduce the dislocation. The effort most significantly failed for a long time; finally the bone slipped into position just as the man was dying.

A *post-mortem* showed that not alone the fibro-cartilage around the periphery of the acetabulum, but a bony section at the superior edge also was fractured off. The specimen was not retained. It would have been of value. A few years ago a child of ten years was subjected to several efforts at reduction of the dislocation by manipulation. The head of the bone could be thrown into the thyroid foramen, and was apparently reduced, but as soon as the extension was removed there was an immediate reproduction of the dislocation, although a deformity did not exist. After two or three surgeons had made a number of efforts to reduce the dislocation by manipulation, the child was put in bed, with extension by a splint, and eventually recovered. I am satisfied that this case—although, fortunately for the child, we had no opportunity to verify the opinion, for she lived—was also a case in which the cartilage, and perhaps some bone, had been torn off.

Occasionally, as has been demonstrated by Dr. Murdoch, dislocation which can not be reduced by the ordinary manipulations will be reduced by a little traction. I remember one in which I was able by my own unaided effort, catching the foot and pulling powerfully upon the limb, to replace the head of the bone in the socket.

Dr. Pettit: Two cases I saw in the hospital which were reduced by extension. One had been worked with a long time by a half dozen physicians and attendants, and there was failure to reduce the dislocation. While they were rigging up the rope and pulley arrangement to try, some one grasped the man by the limb, and by no great force, but simply by steady pulling for maybe three fourths of a minute, the bone slipped into place. Since that time I have seen one other case reduced in the same manner, after quite a good deal of manipulation without success, by extension without a great deal of force, but the force being kept up some minutes steadily.

Dr. Buchanan: I recall a case in which efforts were made to reduce a dislocation of the

hip in a railroad man by, I suppose, five or six competent surgeons, and when they were through the reduction was unaccomplished, and the opinion was expressed that it must be a fracture of the rim of the acetabulum neck, and that it was impossible to reduce it. Dr. LeMoyne requested to be permitted to put on an extension, and by extension and some little manipulation, not the ordinary manipulation, but manipulation during extension, he reduced this hip-joint. This man was on the point of being returned to bed with his luxation unreduced when the successful attempt was made.

Dr. Batten: I had a case of dislocation of the hip, and could not reduce it. Dr. Emmerling, Dr. Dickson, and Dr. Reiter were present. The bone went into place with a snap under Dr. Reiter's manipulation.

Dr. Koenig: I would like to ask if it might not be possible that the position of the rent in the capsule has much to do with the return of the bone. Where the surgeon is not able to return the bone by the method of manipulation, and where the method of extension is readily followed by reduction of the bone, is not the location of the rent a factor in the case?

Dr. McCann: What I wish to say is, that in the cases of extension, the patient being entirely under the influence of an anesthetic, completely relaxed, the amount of force used was not great. In my own cases I did not exert a very great force, and it slipped in. Another method consists in etherizing the patient, laying him on his abdomen on a table, and allowing the limb to hang down over the end of the table. The result is that after a certain length of time the muscles of the abdomen relax, and with almost no manipulation the head of the bone is thrown into its proper position.

Dr. Huselton: A farmer sustained a simple dislocation of the shoulder. He was taken into the town of Harmony, where two surgeons tried to reduce the dislocation. They failed, and had the man loaded into a spring wagon and sent to my office, with a note asking me to call in some of my friends and attempt to reduce the dislocation, and, in the event of a failure, to send him to the West Pennsylvania Hospital. I said I would make an attempt to

reduce it myself. I took the patient into my back office, laid him upon the lounge, and standing behind him, I pulled and told him to pull, which he did, and I think the dislocation was reduced in about two minutes. Now these were competent men who failed with this case, and they seemed to have exhausted every effort. Therefore I think we should be very charitable indeed before we condemn a physician for failure to reduce a dislocation.

Dr. Lange: I wish to report three fatal cases of pericarditis. The first was a large German, previously healthy, with no discoverable hereditary taint, except that his mother had died of some lung disease at the age of thirty-two. This man was a cooper by occupation, and boasted of his previous excellent health. He presented on examination the usual signs of pericarditis except that of pain. He presented in addition the ordinary signs and symptoms of a slight fever. Pericarditis was suspected in this case, and during the next three weeks under observation it was ascertained to exist. This man died of heart failure, on the water-closet. The autopsy showed the heart to be the so-called hairy heart. There were numerous and strong adhesions between the parietal and visceral layers; also other lesions, consisting of organized bands from the visceral to the parietal pericardium, of from a quarter to an inch in length, and as strong as the chordæ tendinæ. These must have exerted a potent and pernicious influence upon the contraction and rotation of the organ. Still other bands were free at one extremity, which floated in the very limited amount of effusion. This was a tubercular pericarditis, and nowhere else throughout the body was tubercle discovered.

The second case occurred in an Italian, aged thirty-five, who had a left-sided, lower-lobed croupous pneumonia, accompanied by a pleuritic effusion large enough to require tapping. In the third week, resolution not happening, the pneumonia became purulent, and thus developed the secondary pericarditis. On autopsy the heart was found to be like the first, and the effusion to be small. This patient died while sitting on the edge of his bed.

The third case was an Irishman, a very active man, yardmaster at one of the railroads

here. He came to my office complaining of shortness of breath, and presented the signs, symptoms, and phenomena of a mild fever. He had no pain, little headache, little backache, general malaise, anorexia, in short all the signs and symptoms of a slight fever, a pericardiac friction murmur, and a tumbling heart, but no enlarged area of cardiac dullness. Dyspnea was his only complaint. He had it two months, and it was growing. After two weeks he thought himself so well that we could not restrain him. He would leave his bed and go about his room. One Sunday morning he sent for a barber to shave him. He got up, sat on a chair, took the Sunday paper to look it over, and fell dead. There was no *post-mortem*. From repeated physical examinations I believe the conditions would have been found as in the other cases. In pericarditis of gravity, which cases constitute the small minority, there is one remedy to which we at last arrive. This is digitalis. It is said that digitalis is proper to strengthen the action of the heart. My experience with these cases and others leads me to think that digitalis has very little effect in increasing the power of the heart in pericarditis.

Another point is that death from pericarditis, which is usually ascribed to the size of the effusion when it is large, may be due rather to interference with the action of the heart by adhesion. It is my opinion that this latter is frequently, and that large effusions are rarely, the cause of death. Large effusions belong rather to those inflammations of the pericardium which complicate rheumatism and nephritis, and which are not fatal. When the effusion is large, what can we expect from digitalis? The interference in this case is not with the contraction, but with the filling — the diastole of the heart; and this, being purely a muscular relaxation, is uninfluenced by digitalis. The only effect, then, that we should expect is that which would happen after the administration of digitalis in, for instance, the granular degeneration of typhoid fever, pneumonia, or any disease of gravity and duration; and this, it must be confessed, is little. The effect, indeed, would be less, for even if the systole should be improved by digitalis, the diastole

can not be, and consequently the intra-arterial tension is not increased. On the other hand, if the adhesions constitute the obstacle to efficient contractions, we can understand how an increase of power in systole by digitalis might fracture, tear off, or free the parietal from the visceral pericardium, and thus allow an increased quantity of blood in the arterial system. But I have not observed this to happen, and the administration of digitalis for pericarditis is pregnant with disappointment, and is in striking contrast with its effects in heart dilatation.

Reviews and Bibliography.

Philosophy in Homeopathy. Addressed to the Medical Profession and to the General Reader. By CHARLES SILLACK, M. D., Professor of Materia Medica in the Homeopathic Medical College of the University of Michigan at Ann Arbor. 174 pp. Chicago: Gross & Delbridge. 1890.

When one would in fairness, and in the light of modern investigation, consider the philosophy of homeopathy, he finds himself unconsciously drifting into the philosophy of illusions and hallucinations. In the great summing up at some remote period of human history, not the least of the blessings recorded as having fallen to the lot of man in his long march to the realms of reason and enlightenment will be the episode of Hahnemann and homeopathy.

When one takes into consideration what men were everywhere suffering from the methods of treatment then in vogue, nothing could appear more natural than the reaction that took place. And it is not to be forgotten that Hahnemann was no more blind in the practice of his nothings than the regular school was in its destructive heroic methods.

He showed mankind what potencies for good there are in doing nothing. In his day he was not more astray from the path of science than many others. If Hahnemann sought for potencies, Newton sought the secret of changing the baser metals into gold, and no one was too enlightened to seek for perpetual motion.

The discovery of the correlation of forces, however, has done away with dynamization, in the homeopathic sense, and left all its followers face to face with a fundamental truth which they dare not see. The consequence is, that every one, like the ostrich, has his head in the sand, trusting, by blinding his own eyes, to prevent others from seeing. It is thus that even in other matters the habit of mental squint follows the homeopath, and he is debarred, like the slave of any superstition, from reaching a clear appreciation of the operation of the forces of nature.

This book is true to the rule. The cloudiness, the mental haze, the signs of the adopted "blot on the brain," pervade it in every page.
D. T. S.

Electricity in the Diseases of Women, with Special Reference to the Application of Strong Currents. By G. BETTON MASSEY, M. D. 210 pages. Price, \$1.50. Philadelphia and London: F. A. Davis, publisher. 1889.

This is the first attempt at a complete treatise restricted entirely to the electrical treatment of the diseases of women. It does not consist of a collection of all the fancied successes reported in the use of this agent, but of a selection from the most cautious observers, and such as in the fullest experience have been urged in professional favor.

The physics of electricity and the construction and management of batteries are treated in an exceptionally clear manner, by way of introduction, while the details of treatment are gone into with fullness; so that one who has well studied these pages is well prepared to attend to all the technique of electrical therapeutics in gynecology.

When one reads that thirty cells are useless for endermic application, and that less than one hundred milliamperes are of no value in the treatment of fibroids, he feels disposed to smile at the cures thought to have resulted from ten to twenty cells and not more than ten milliamperes.

While it is safe to say that a method of treatment so well tried and so little relied on as a therapeutic measure is beyond all doubt overrated, nevertheless electricity, by universal

consent, in many cases does good, and in still more is one of the most harmless of placebos.

To all such as are in a position to employ electricity in the treatment of female diseases, we confidently commend this volume as not at the present surpassed in its line. D. T. S.

Legons sur les Maladies du Larynx. Faites la Faculte de Medicine de Bordeaux (cours libre). Par le Dr. E. J. Moure. Recueillies et Redigees par le Dr. M. Natser. 599 pp. Paris: Octave Doin, editeur. 1890.

In large, clear print and bold type, the founder of *la Revue de Laryngologie* has here given us in lecture form the results of his ripe experience with diseases of the larynx.

Beginning with a consideration of the importance of the laryngoscope and the method of its use, he proceeds to consider in a charming style the various diseases to which the larynx is subject. After a full discussion of local lesions, the morbid conditions of the larynx following the eruptive fevers receive extended attention.

On several points the author has original views of pathology. Thus lupus and scrofulous ulceration he considers identical, and uses the terms indiscriminately.

Besides being one of the leading authorities and most prolific writers in France in his department of medicine, Dr. Moure is also the translator into French of the two principal works of Dr. Morel Mackenzie, and we feel the favor could be returned in no better way than by the translation of Dr. Mour's work into English by some one competent to do the subject justice. D. T. S.

A Treatise on Orthopedic Surgery. By EDWARD H. BRADFORD, M. D., Instructor in Clinical Surgery in Harvard Medical School, and ROBERT W. LOVETT, M. D. Illustrated with 789 wood engravings. 783 pp. New York: William Wood & Co. 1890.

The authors, deeming that most previous writers have limited themselves to existing deformities, such as club-foot, lateral curvature, and bow-legs, have endeavored here to embrace the prevention as well as the cure

of deformity. With this view they have considered diseases of the joints at considerable length, inasmuch as they are among the most common sources of deformity and disability.

Perhaps the most attractive feature in the work is the profuseness of illustration. By this every obscure point in treatment is elucidated, and the mechanical resources at present known appear to be illustrated to exhaustion. Upon no class of afflicted humanity have more rapidly increasing benefits been conferred than upon the subjects of the various deformities, that are the special care of the pediatric surgeon. And this work is bound to do much to widen the sphere of those benefits by its helpfulness in many quarters where opportunities of preparing for this class of work have not hitherto been presented to local surgeons.

D. T. S.

Transactions of the American Orthopedic Association. Third Session, held at Boston, Mass., September, 1889. Vol. II, 296 pp. Philadelphia: Published by the Association.

This volume of reports is the history of a very interesting meeting of the Orthopedic Association, and one that may be perused with profit by the general practitioner.

Among other contributions, especial interest attaches to that of Dr. V. P. Gibney, of New York, on typhoid spine, a term which he applies to inflammation of the vertebræ following typhoid fever. There is perhaps no line of surgical practice in which the benefits are more direct and obvious than in orthopedics, and the men who form this society have the honor of having contributed a large share to its inauguration and development. D. T. S.

Transactions of the Southern Surgical and Gynecological Association. Vol. II. Second Session, held at Nashville, Tenn., November, 1889. 379 pp. Published by the Association. 1890.

The Southern Surgical and Gynecological Association have a right to congratulate themselves on their excellent work, as revealed in this volume, as also have the entire Southern people. The countrymen of McDowell and Sims evidently intend that the reputation of

their section shall not suffer at their hands. While it is true, as Dr. Johnstone put it in regard to one of the members, some may have "come with that same old speech," the majority of the discussions were fresh and in the line of progress.

Especially to be commended is the address of the distinguished president, Dr. Hunter McGuire, embracing as it does a thoughtful and eloquent tribute to the eminent leaders of thought and action which the South has contributed to that company of great names which the English-speaking people may boast, and whom the world delights to honor.

This society may be expected to prove a large factor in shaping the progress of scientific medicine in the South.

D. T. S.

Correspondence.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Dr. Landouzy has published, in the *Annales des Dermatologie et de Syphiligraphie*, a note on Syphilitic Contagion During the Tertiary Period. Two cases are given. The first, a man who had contracted syphilis five and a half years previously, since which time he had shown no signs of disease, is reported to have communicated it to his wife, whose disease began with a chancre of the vulva. In the second case a man had a gumma of the penis, which diagnosis by the author as to the nature of the lesion was confirmed by Dr. Fournier. The patient had married a few months before, and Dr. Landouzy found the wife suffering from syphilitic roseola, enlarged glands, etc., but he could not detect any trace of a primary sore. Dr. Hardy had seen two cases which confirmed Dr. Landouzy's assertion as to syphilitic contagion without any external manifestation. Dr. Fournier stated that he had recently seen a young man who had contracted syphilis fifteen years before, who had been treated and had recovered, and who had obtained permission to marry. After marriage the patient had pulmonary trouble, in all probability of a specific nature, and then sclerous glossitis with small erosions on the tongue. The man was a confirmed smoker, and Dr. Fournier warned him

of the danger of infecting his wife. Two years later the wife came to Dr. Fournier with a chancre of the lower lip together with secondary symptoms. The husband had only some insignificant erosions on his tongue. Dr. Balzer called attention to the fact that mucous patches might appear time after time for an almost indefinite period. He had seen a girl of sixteen who had inherited syphilis, and who since her birth had had almost constantly mucous patches in her mouth. Dr. Zambaco declared himself skeptical, especially with regard to Dr. Landouzy's first proposition, viz., the power of a syphilitic person, long ago cured, and with no signs of syphilis, to communicate the disease. A great many cases, he said, would be required to change completely our ideas on the subject.

In the same publication Dr. Cruyl gives a new preparation of mercury for subcutaneous injection. Corrosive sublimate, he observed, may be dissolved in olive oil simply by the aid of heat, but complete solution is only obtained by frequent shaking of the mixture. The author gives the following as an easier method: One gram of sublimate is dissolved in ether, and this ethereal solution is added to 100 grams or more of olive oil. The mixture is then shaken and heated in a water-bath until the ether has evaporated. By this means a perfectly limpid liquid is obtained. If any solid particles yet remain suspended, they should be separated by filtering through paper. The author stated that ten or twelve injections are necessary for cure, and that no local or general inconvenience is ever caused.

Another important question of hygiene, interesting more especially to people living in the country, has recently been raised at the Society of Public Medicine, by Dr. Saint-Yves-Ménard. He referred to the relation which exists between the diphtheria of man and that of birds. Several volumes have been published to show that the two maladies have the same origin, and that in many cases an epidemic of diphtheria in man was produced by an epidemic of the same sort reigning in the poultry yard. Dr. Ménard, who was for many years Director General of the Jardin d'Acclimatation of Paris, protested against this opinion, and in support

of his thesis he cited the cases where children who have the care of the birds or fowls suffering from diphtheria were never attacked by the malady. Moreover, bacteriological researches show that the microbe of diphtheria in man is not the same as that of diphtheria in birds.

In my letter which was published in the American Practitioner and News of the 29th of March, I gave a summary analysis of the urine. A new procedure to detect the presence of sugar in the urine, recommended by Dr. de Becker, of Cairo, may be found interesting. In the manufacture of paper for visiting cards, potash is employed to render the paper more heavy and more solid. It is sufficient, says Dr. de Becker, to dip a white card in a solution of the sulphate of copper and to leave it to dry in the open air or exposed to fire. If on this card thus prepared one should trace with a lucifer match, dipped in the urine to be examined, a line, this latter becomes brown if there is any sugar in the urine, and the coloration becomes browner the more sugar it contains.

At a recent meeting of the Society of Public Hygiene the following table was drawn up for the information and guidance of the masters of public schools, with respect to the prophylaxy of infectious maladies, and the time that may be allowed to intervene between the onset of a malady in a pupil and the date that he may be readmitted into the school :

MALADY.	Period of incubation.	Period of invasion.	Period of readmission that may be authorized.
Scarlet fever.....	7	2	Forty days from the first day of invasion.
Measles.....	9	4	Twenty-five days from the first day of invasion.
Whooping Cough.....	12	8	Thirty days after disappearance of the characteristic cough.
Diphtheria.....	5	2	Forty days from the first day of invasion.
Mumps.....	18	2	Twenty-five days from the first day of invasion.
Varicella.....	14	2	Twenty-five days from the first day of invasion.

At the Société de Thérapeutique, Dr. Trasbot read a note on the supposed toxicity of calomel produced by the transformation of this substance into the bichloride of mercury at the temperature of the human body, as affirmed

by M. Mialhe. Other chemists admit that this transformation takes place only in infinitesimal quantities in the presence of pure water and of salt water, and that is necessary, besides, to have the action of the air and of organic matters. Dr. Trasbot is quite opposed to this opinion, and said that his researches permitted him to affirm that, in any circumstance, the transformation of calomel into sublimate, even in the presence of the chloride of sodium, is almost *nil*. Other members who took part in the discussion agreed with Dr. Trasbot, and affirmed that if accidents with calomel were to be feared clinical practice would have reported examples, but as yet none have been cited. Certain cases of poisoning might have been related after the employment of calomel, but they were due to some other cause than to the presence of chloride of sodium.

At the Société de Chirurgie, Dr. Polaillon made a communication on the abortion of boils and carbuncles by the subcutaneous injections of carbolated glycerine. He resumed his practice in this connection in the following terms : It being admitted that these affections are due to the presence of the pyogenic microbe, the treatment of carbuncle by incision with a bistoury is dangerous, because it opens numerous passages for inoculation. Incision with the thermo-cautery is far preferable, but to obtain a profound distinction of the morbid seat nothing equals caustics. Dr. Polaillon prefers the paste of canquoin (a mixture of the chloride of zinc with paste), as being the most manageable and efficacious. The following is his mode of procedure : (1) When the carbuncle commences to suppurate, he introduces into it caustic darts with the above paste. In a few hours a shrinking of the carbuncle takes place, a solid mass, separated from the healthy tissues by a zone of cauterized tissues, is formed ; at the end of a few days this slough becomes detached and is eliminated, leaving at its place a granulating surface which is rapidly cicatrized. (2) At the commencement of the carbuncle the surgeon punctures the tumor with the thermo-cautery in different places ; leaving a space of two centimeters between each puncture, he thus obtains the same slough. From the commencement of the disease he employs poultices, which

he renders antiseptic by preparing them with a bichloride-of-mercury solution. The average duration is twenty-one days.

PARIS, July, 1890.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Menthol has been recommended in the treatment of obstinate vomiting of pregnancy. One part of menthol should be dissolved in twenty parts of alcohol and thirty parts of simple syrup, a teaspoonful being given every hour. This prescription is claimed to be successful in arresting nausea and vomiting.

Sir Henry Acland, Regius Professor of Medicine in the University of Oxford, has published, under the title of "Oxford and Modern Medicine," a letter addressed to Dr. Andrew, of St. Bartholomew's Hospital, in which he tells the story of the struggle which ultimately led to the growth of science-teaching at that university, and protests against the excessive specialization toward which Oxford medical students are being urged. Sir Henry asks: "Shall Oxford be, as regards medicine, a place of the most perfect preparation that can be devised for the best clinical study in the competent manner elsewhere, or shall Oxford be now made a complete medical school?" His answer is decisive. He is for perfect preparation of the medical students for clinical study elsewhere. Sir Henry does not hold that one of the functions of a university is to play the part of a professional school. In learning the actual practice of medicine and surgery it is essential that the student should be amid the teeming population of a great town. This necessity, as he points out, is recognized at Cambridge, where the medical students are advised to read for the natural sciences tripos, and to leave most of the actual practice of their profession to be learned in the great medical schools of the metropolitan hospitals. Sir Henry, since his appointment as Lee's Reader in Anatomy forty-five years ago, has labored on behalf of the Oxford medical degrees. At that time the study of natural science was all but extinct in the university which had given birth to the Royal Society two

hundred years before. How feeble a spark of scientific interest survived amid the theological struggles of the time may be judged from the fact that Sir Henry Acland's predecessor had only one student from the university, one or two from the town, and yet another one or two from the college!

Some highly interesting experiments are being made with a view of ascertaining the probable character of the wounds which will be inflicted by the new small-bore rifles, which have been adopted in European armies. The dead human bodies were arranged so as to represent a company, with intervals, in fighting formation, and the bullets were finally received in bags of sawdust, where, at the short ranges, they were found unaltered in shape. When firing at a range of about two hundred yards the bullets were found to pass completely through from four to five ranks, at four hundred yards from three to four ranks, and at ranges between eight to twelve hundred yards from two to three ranks of a company in fighting formation, even in cases where the bullet had encountered large bones. In but rare cases was a bullet found to have lodged. The general results up to the present have proved conclusively that the new weapons cause greater penetration and less laceration than did those formerly in use. It thus appears that the diminution in bore rendered necessary on tactical grounds, and especially the introduction of the "covered" bullet, is a direct step in the cause of humanity. In future wars more rifle wounds will probably be inflicted, but the proportion of clean, smooth wounds will be larger, and these in consequence of the smaller dimension of the passage will tend rather to a subcutaneous character, recovery will be more favorable, mutilation and crippling be more often avoided.

An afternoon conference on "Alcohol and Childhood" has been held in London, the proceedings being remarkable for the number and standing of the medical men who participated in them. Dr. Wilks, consulting physician to Guy's Hospital, declared that children should be brought up without any strong drink whatever. He had experienced difficulty in dealing with children who were called "delicate."

Even in the majority of such cases he had no reason to believe that alcohol was of value, but that on the contrary it often did positive harm. Port wine was regarded as the universal panacea, but its use was a common delusion; it undoubtedly tended to destroy the child's appetite. Dr. Down, physician to the London Hospital, was also convinced that alcohol, as a food, was non-essential and thoroughly detrimental to the welfare of a child. Nor was he prepared to admit that it was as useful as a medicine as some fancied. An analysis of the statistics of wine given at the London Hospital during the last eight years showed that in the case of one physician the average administered per patient was 8.05 ounces, while another used 43.6 ounces, the mortality among the patients of the two being 14.7 and 18.2 respectively, and the average stay twenty-seven days as against thirty-one days. Drunkenness in parents distinctly tended to idiocy in children.

At the meeting of the British Gynecological Society notes of two cases of fibroid tumors of the pelvis were contributed, which gave a curious impression of fluctuation, though the tumors in both cases were subsequently shown to be solid masses of white fibrous tissue. In the first case Dr. Joubert was unable to complete the removal of the tumor, and the woman succumbed a day or two afterward of shock. In the second case he had succeeded in enucleating the tumor; again death took place, on this occasion from hemorrhage into the sac. In the discussion which took place Dr. Bantock thought it was always undesirable to remove such growths when low down in the pelvis.

Infusorial earth, sterilized by being subjected to a heat sufficient to cause it to glow, constitutes, so it is said, an excellent inert dusting powder. It is capable of absorbing from five to seven times its own weight of water. Mixtures of equal parts of this earth, thus dried, with salicylic acid, salol, or iodoform, have proved of equal use.

Exalgine is one of the latest additions to medical compounds. It is claimed for exalgine that, although possessed of antiseptic and antipyretic properties, it is also analgesic. The

remedy is now upon trial, the reports up to date being highly in favor of it. The most convenient form of administration is found to be a mixture in which the exalgine is dissolved in a small quantity of spirits of peppermint, whisky, or tincture of orange, before the addition of water.

Cardinal Manning has received an illuminated address and a check for £7,500 in celebration of the silver anniversary of his episcopacy, and has declared his intention to devote a portion of it to founding a bed in the accident ward at the London Hospital for the maimed in working on the river Thames.

The Prince and Princess of Wales are expected to open the new Royal Infirmary, Liverpool, in October next.

LONDON, June, 1890.

Abstracts and Selections.

A PROBABLE CASE OF MYXEDEMA.—Dr. P. C. Sutphin, Hartsville, Ky., writes in Gaillard's Medical Journal:

Only a few years ago myxedema was prominently brought before the attention of the medical profession as a special disease. In the interim we may suppose it to have existed for quite a long period before we have any mention of it, being included before this among the anomalies or regarded as a *lusus morbi* not to be accounted for. We have so far but little literature on the subject, and what we do have can neither be said to be full nor at all times very satisfactory. As yet, for instance, we know nothing definite as to its etiology, while as to its treatment nothing so far has been discovered in the way of remedies for it that has promised any hope of cure in it. In all the literature that I have read on the subject—that is to say, a report of the Myxedema Committee before the Clinical Society of London (*vide* Gaillard's Medical Journal, July, 1888); Hammond (work on Diseases of the Nervous System, ed. 1888), and a monograph on it by Dr. Ord in Quain's Dictionary of Medicine (1888)—it would seem that the disease, if not confined altogether to adult females, had been so much so at least as to make it doubtful whether it ever occurred in the male. Dr. Ord says, in fact, that its subjects "are, some doubtful cases excepted, *always* adult females." We are not told, however, what these "doubtful cases" were, and until this is cleared up we could not say with any certainty that it might not occur also as a verity in the male. Besides,

Dr. Hammond says that "two cases have been observed in males;" and as there seemed no doubt but that one of these at least was genuine, so it may turn out, upon further investigation of and more experience with this malady, that while it may appear only in adult women in by far the greater part as a rule, yet that exceptionally we may also find it ere long every now and then in the male, thus establishing its *genuineness* over the present doubt hanging round it in the male as well as the female. Further investigation into this subject will also probably establish, as I am greatly inclined to think, that myxedema will not prove altogether a disease of adult middle life, but exceptionally also one of youth or adolescence. We are influenced by Dr. Ord, indeed, in his report on this disease as chairman before the London Clinical Society, that in its pathology and symptoms it is so identical with the sporadic cretinism of children as to lead to the belief that the two are practically the same, or that the sporadic cretinism affecting children is the myxedema of adults. (Report, clause 14.) If this be the fact, *ergo*, and the two only constitute "a distinction without a difference," then as a *sequitur* it would seem that the supposition would not be unreasonable, under the close affinity between the two, that true myxedema might occur exceptionally in youth also.

I have deemed it proper to make the foregoing remarks before giving the details of a case of what I regarded myxedema, lately under my care, as the case presented itself in a boy nine years old, and in all probability might be included among the "doubtful cases" by those who have had more opportunities of observing this disease than I have had. I would state, however, that if it was not myxedema, then I can only regard the symptoms as laid down for this disease as at fault; or if not at fault, at least not well comprehended by me. As just said, the patient was a boy nine years old. He was well grown and of a stout, robust build, and had enjoyed excellent health from infancy up to the period of his attack. He had been noted for his bright, ready intelligence, and learned rapidly at school. It was while going to school, however, that he gradually became "dull," failed to study well, and recited his lessons badly. As might be supposed, this was attributed to "laziness," both by his teacher and his parents, and he was coaxed, scolded or threatened, in turn, to bring him round to his former study again, but to no avail. This condition, as I learned from his mother, lasted several months, when it was noticed that his body began to "swell all over." This was regarded as the result of worms or "cold," and

for these he went through the usual "home treatment" for three weeks, when, getting no better, but growing worse, he was brought for consultation with me as to his case. My diagnosis at first glance was general dropsy from probably some cardiac trouble, but on examination I found his heart quite intact and no apparent trouble anywhere in the internal viscera. I found also that what I supposed to be dropsy left no "pitting" whatever upon even the hardest pressure, but was as resilient as the most healthy tissue could be. His face and neck first noticed presented a bloated appearance, transmitted more noticeably to the eyes and the lips. His countenance was expressive of passivity rather than of sadness or stupidity. Not having been informed as to his mental condition just referred to, I thought the trouble most likely would prove transient, and prescribed for him a diuretic mixture, and also, as he seemed to be very anemic, one of the preparations of iron. He continued, however, in spite of my treatment, to grow rather worse, when he was taken down with a mild typical form of typhoid fever, this disease being epidemic then in the section. His temperature, which before had been 95°, now ran to 101°, never ranging beyond this; urine highly colored, specific gravity 1020; no albumen nor sugar; no microscopic examination. Several times during this time he became blind, without, however, being unconscious, and remained so for several hours. Pulse, which before that had ranged between 60 and 70, now some 110. From the fever he was fairly convalescent in some two weeks; bowels checked, appetite good, etc. No improvement, however, in his main disease. The face now commenced flushing at irregular intervals, the flush sometimes lasting several hours; sometimes coming up in a few minutes and disappearing as suddenly. With these flushes there was now frequent light bleedings from the nose, which, however, as they seemed to give relief, were not interfered with. On several occasions, however, I may say, the epistaxis became excessive and had to be stopped with the "plug." One noticeable feature in his flushing was that it would begin sometimes near the malar bone, as a mere red spot, and then visibly spread until it had formed a circle about equal to the perimeter of a silver dollar. This would remain sometimes for hours; sometimes it would scarcely form before it began rapidly to disappear, and in less than a minute's time, perhaps, could not be seen. No aberration of mind, though he dictated for himself, and insisted on having his own way about every thing, which had to be accorded him, when possible, as an imperative demand by him, and what he re-

garded an absolutely necessary concession to his wishes. Obedient in health, now, in the peculiar condition of his mind, he turned master of others and exacted a rigid obedience from them; not as a sick child, however, ordinarily would, but as one with a diseased brain. To be more brief, his disease soon assumed a greater gravity, the general swelling of the body increased, serous infiltration occurred in the feet and hands, and death soon closed the scene. It is proper to say that the fingers did not at any time present the "spade-like" appearance mentioned as common in myxedema, while the toes, however, were "knobbed" at the end, corresponding with the same condition observed in the fingers by others in myxedema.

In conclusion, I would remark that I only had this case under my care some six weeks; though, as it presented the same characteristic symptoms throughout, it would seem that ample time was thus given for forming some more definite diagnosis in regard to it. That it was excited into more acute action and cut short by the attack of typhoid fever, was altogether evident, still it prominently maintained to the last its peculiar features as a special disease, and could only be studied as such. I would not say, certainly, that it was myxedema, though this was my diagnosis of it, as well as that of two well-informed physicians, Drs. Mudd and Bowling, who were called in to see the case with me. These gentlemen, like myself, had never seen myxedema, and we only arrived at our diagnosis from literature on the subject. In the mean time our literature on the subject, as must be conceded, is yet limited and not free at times from incertitude, and much is yet to be learned of this disease, therefore we can not tell as yet what ages or classes of persons may not at last be included in it.

THE ADMINISTRATION OF NITROUS OXIDE GAS.—At a recent meeting of the Odontological Society some notes were read by Dr. Silk on a series of 1,000 cases in which nitrous oxide was administered, and which had been systematically recorded by the author. The object of the paper was, he said, twofold: to insist, first, upon the value of records in all cases of anesthesia; and, secondly, in especial cases, inasmuch as one example was better than a host of theory. The best way of keeping such notes was probably by a tabular arrangement, yet bearing in mind the peculiarity of cases and not making the table too elaborate. He grouped the facts collected from the analysis under three heads: "Antecedent conditions," "phenomena," and "after-effects." He did not include mere nervousness in antecedent condi-

tions, but neurotic tendencies in a patient were often productive of hysteria after the administration of gas. There were but three cases of those who were subject to epileptic fits; one a healthy girl, eighteen years of age, who had gas twice. The first time there was nothing noteworthy; the second, after the removal of the face-piece, she struggled to get her hands up, and afterward described her feelings as pain in the forehead, where the epileptic aura commenced. In four cases of phthisis there was nothing out of the ordinary. In one case of valvular disease of the heart the patient had gas four times, the lividity following being more lasting than normal, and on one occasion a tendency to syncope ensued. Diabetes, one case; the urine being examined, no change was found. In nine cases of pregnant women nothing had gone wrong, and he remarked that he would have been sure to hear of it if there had; but in most there was a tendency to vomit. In the only case during lactation the patient had a bilious attack next day, and the infant seemed upset, and this point Dr. Silk thought worthy of more attention than was generally given to it. Of consecutive administrations of gas—that is, where the patient was allowed to regain consciousness, and then after a few minutes again submitted to the anesthetic—he had sixty-five records. In 12 per cent there was more or less retching; in 2 per cent asphyxial symptoms necessitating pulling forward the tongue; a good many became hysterical, and several suffered after-effects; but 70 per cent, as far as was known, had no trouble. The average quantity of gas used was between four and five gallons, and the average time during which the face-piece was in position was 67.5 seconds. The duration of the anesthesia was very variable, as it was exceedingly difficult to know when sensibility was recovered; the absence of the conjunctival reflex or the presence of jactitations was no guide. In 467 cases pure gas was employed either from the bottle of compressed gas or through a gasometer, and in 502 a supplemental bag, where the same gas was inhaled over and over again. The record showed that unpleasant effects had immediately followed more often with pure gas than with the use of the supplemental bag, whereas the remoter symptoms occurred in greater number after the use of the supplemental bag: but this was more apparent than real, owing to the lesser number of cases where pure gas was used and the great difficulty of getting an authentic account of the after-history of the patient.

Pulse tracings, with, however, some variations, kept very generally to the type of the plates published by Dr. Dudley Buxton, showing acceleration, loss of the tidal wave, and ac-

centuation of the dicrotic wave. Rhythmic movements of arms or legs were frequent, and Dr. Silk was at a loss to explain them. Opisthotonos was most common in females, and was invariably accompanied with profound anesthesia. Wide dilatation of the pupils was observed in 797 cases. In twenty cases there was primary dilatation followed by contraction, and he did not think that dilatation was a true test of narcosis. Micturition occurred in ten cases, or 1 per cent; all were females. In three of these there was opisthotonos, and in one much struggling. Erotic movements and sexual illusions were present in six cases—all females, five of whom were unmarried, and one married and in an early stage of pregnancy. There was great difficulty in getting records as to the after-effects of nitrous oxide, but probably more or less headache was the rule rather than the exception.

In the discussion, Mr. Braine remarked that it was safe to give gas to an epileptic; he had known a fit produced in such a patient by the extraction of a tooth, but upon another occasion where gas was administered there was no such untoward result. He considered the apparent deepening of anesthesia sometimes observed occurred mostly where lower teeth were extracted, and was due to the operator pressing the tongue back with his fingers, and thus causing a certain amount of asphyxia. Rhythmic movements were generally started voluntarily by the patient with the idea of informing the anesthetist that he was "not off."

Mr. Bailey thought that it was impracticable to tabulate private cases. There was no danger in giving gas to epileptics, as it rarely induced a fit; in the large majority of cases the pupil was dilated; anesthesia was most profound a few seconds after removing the face-piece.

Dr. Dudley Buxton owing to his association with Mr. Victor Horsley, had given gas to a large number of epileptics, and in only one was there an attack, in which case he continued the administration and the convulsions ceased, and no untoward event occurred. In persons predisposed to insanity, or in whom attacks had occurred, the administration of gas, chloroform, or ether might occasionally light up the disease or lead to an exacerbation.—*Lancet*.

DR. ARMAUER HANSEN, of Bergen, whose name is well known in connection with leprosy, contributes to the current number of *Vi chav's Archiv* (Bd. cxx., Aft. 3) an interesting article upon the vexed question of the transmission of the disease. His remarks have been evoked by a statement of Baumgarten, based on the fact that leprosy does not prevail among the

Norwegians who have emigrated to North America, showing that it is an infectious disease, which is diminishing in virulence. Hansen, therefore, seeks to defend his position that leprosy is not inherited. He shows, indeed, that in Norway there has been a decided decrease in the disease, for whereas in 1856 there were as many as 3,000 lepers in that country, now the number is barely more than 800. Taking the statistics of Nordmoere, near Christiansund, from 1856 to 1880, he also proves that there has been a considerable decline in the annual number of fresh cases, and in the total occurring at the close of each year. But these facts are not to be explained on Baumgarten's hypothesis, for the decrease has taken place coincidentally with improved measures of isolation. On the other hand, Hansen can not concur in the view, popularized in some quarters, that leprosy is on the increase. It is true that in the Sandwich Islands the disease has increased in great proportions, but is less easy to affirm this of other parts, for example, India.

Turning to the subject of inheritance, he gives Baumgarten's opinion that in this respect leprosy resembles tuberculosis. At the same time, to adopt the view of a pure heredity involves the assumption that leprosy may remain latent, and only reappear in later life, or even in succeeding generations. The former example would seem to harmonize with "latent inherited" syphilis, but Hansen points out that it is highly probable that such cases may have congenital visceral lesions, and that the "latency" only really applies to the external manifestations of the disease. Latency of syphilis enduring throughout a whole generation is unknown. But heredity, as we know it, in the transmission of physiological characters, is not reproduced in the history of these infective diseases. Thus, heredity generally involves the transmission of attributes to the same sex, or the appearance of characters at definite ages, or atavism, none of which conditions obtain in the "inherited" transmission of infection. Much more must the inheritance of disease differ from normal inheritance when the virus is of a parasitic nature. A parasite can not be transmitted by inheritance; it may be handed on to the child by the parent, but in a different sense from the transmission of qualities primarily impressed on the sperm-cell or germ-cell. To speak of "inherited infection" is, he considers, a contradiction in terms. Now, it is quite true that leprosy is a family disease, but this fact favors contagiousness quite as much as it does heredity. And both the decrease of the disease in Norway and its increase in the Sandwich Islands are far more explicable on the doctrine of contagiousness than on that of

inherited transmission. Isolation can control the one far more than the other.

It is probable, too, that the virulence of the disease is dying out, as Baumgarten thinks. This view seems to be supported by the fact that in Norway there is an increasing proportion of the milder "anesthetic" cases as compared with the "tubercular" forms. But here again the adoption of improved measures of isolation explains in part this divergence, since it is just the worst and most helpless patients who are sent to the asylums. The theory that the virus is becoming weakened is not borne out by the discovery of the bacillus lepre; and hitherto but little success has attended experiments on its cultivation and attenuation. The notion of an "inherited infection" rather than a contagion would, if true, render futile attempts to control the spread of the disease, since many persons might have it in the "latent" form. The proposition is, however, reduced to an absurdity when we regard the cases of the Sandwich Islands, which prior to 1840, were free from the disease. For it would involve—to explain the enormous spread of the disease—not only the assumption of the most extensive promiscuous intercourse, but an actual preference by the women for lepers! Dr. Hansen is then fully persuaded of the contagiousness of leprosy, and of the efficacy of hygiene and isolation for its suppression. He attributes the immunity of the Norwegians in America to their adoption of habits of greater cleanliness and their improved social state. That there are instances of contagion, well authenticated, is an absolute fact; even Boeck, anti-contagionist as he was, met with such an instance when in America. But there are conditions and limits to the contagion; probably it only occurs through inoculation, and, like syphilis, it may be transmitted from parent to child, as well as by personal intercourse in later life.—*Ibid.*

THE VALUE OF URETHROSCOPY.—Dr. J. B. Dearer, of Philadelphia, read a paper on "The Value of the Leiter Incandescent Lamp Urethroscope in the Diagnosis and Treatment of Chronic Urethral Discharges." He described the instrument, which is made in three pieces, the handle, the lantern, and the urethral canule or tubes. Owing to its simplicity it rarely got out of order, the only part needing replacing usually was the lamp, which soon became blackened, and could be changed by simply moving the handle and loosening the two small screws holding the lamp. Pictures were shown illustrating the lamp, and the different forms of batteries to be used mentioned, and preference given to the Grenet or plunge battery.

The use of the instrument was most satisfactory with patient in the recumbent position on a table or couch of considerable height, with the knees bent over the edges and slightly separated. The largest possible tube should be used, and great care taken not to induce bleeding, thus obstructing the field of vision.

The normal condition of the urethra as seen through the instrument was then described, and Otis' views indorsed, that in most cases of gleet more than one stricture was present. By the use of the instrument the following varieties of chronic urethritis could be made out:

(1) Simple chronic urethritis. (2) Follicular urethritis. (3) Ulcerative urethritis. Rarely were two of the above conditions met with in the same case, and without the aid of the urethroscope the exact pathological condition which is keeping up the discharge can not always be made out.

Four cases were reported, and drawings shown of condition of urethra as seen through the instrument, and especial attention called to some causes of failure in curing cases of stricture operated upon by divulsion, and which he believed to be an argument in favor of internal urethrotomy, namely tabs or tears of mucous membrane which have been separated at the time of divulsion; and by bougieing, the usual after-treatment, the union of these tabs to the surface from which they were torn has been prevented.

SUPRA-VAGINAL HYSTERECTOMY.—Dr. Howard Kelly, of Baltimore, read a paper upon "Supra-vaginal Hysterectomy, or Hystero-myomectomy, with Suspension of the Stump in the Lower Angle of the Wound." He limited the operation to cases conceded most favorable for operation—those in which there exists naturally, or in which it is possible to form, a pedicle below the tumor masses, and not atypical cases, in which pan-hysterectomy is called for. The question of the best method of forming a pedicle when the broad ligament is choked with fibroid masses was also not discussed. Operation was discussed in seven steps:

(1) Long incision in linea alba, necessary to deliver the tumor from the abdomen. (2) Elevation of tumor until pedicle is brought into view—tying the broad ligament structures until a pedicle is formed and rubber ligature applied. (3) Cutting away the tumor above the rubber ligature by first splitting the peritoneum high up, and then cupping out the upper face of the stump. (4) Closure of raw face of stump by uniting the opposite sides by a continuous buried suture of catgut, drawn tight to check hemorrhage. (5) Cutting away the rubber

ligature and securing any bleeding points. (6) Closure of abdominal incision down to the stump. (7) Dressing the wound. This was done by packing under the edges of the skin over the now suspended stump some antiseptic gauze; then over the whole a large square of gauze, in which there is a small slit, is placed, and then the long ligatures uniting the peritoneal lips of the stump are pulled through and grasped in the bite of a pair of long Keith's forceps laid horizontally to the body.

The advantages claimed for the operation were: Hemorrhage is not dangerous when it occurs, as it is under control, and sepsis can not get into the abdominal cavity, and the facility of attaching the pedicle in the lower angle of the abdominal wound, especially if short.—*Medical and Surgical Reporter*.

COMPLETE EXTIRPATION OF UTERINE CANCER.—Removal of a cancerous breast is not the most satisfactory operation in surgery, yet the situation of the disease in this case allows thorough removal of the affected organ. Mr. Mitchell Banks, in his now memorable paper on the "Free Removal of Mammary Cancer," read at the Worcester meeting in 1882, and published in the *Journal*, vol. ii, 1882, p. 1138, laid down the rule "that in every case where the breast is removed the axilla should be cleared out as a necessary accompaniment." Many surgeons have come over to his opinion. Extirpation of the uterus for cancer is far less satisfactory than removal of the breast. The recent discussion on Dr. Cullingworth's paper on the subject, at the Obstetrical Society, is highly instructive. It is obvious that no far and wide clearing of suspected connective tissue can be effected as in mammary cancer. Professor Pawlik, of Prague, however, systematically operates on Mr. Mitchell Bank's principle. Professor Pawlik found, as did Ruge and Veit, Williams, and Hofmeier, that cancer of the cervix tends to spread into the parametric connective tissue before it invades the body of the uterus. When the cervix is amputated the disease recurs in the parametrium rather than in the uterine stump. Hence Professor Pawlik boldly dissects away the parametric tissue when he performs vaginal extirpation of the uterus. During the dissection a catheter is passed into the ureter, which otherwise would almost to a certainty be damaged. Professor Pawlik has generally found diseased lymphatic vessels and cancerous connective tissue forming cords in the parametrium. Four cases, with satisfactory results, are recorded in the *Archives de Tocologie* for May, 1890. More after-histories will, however, be needed, and vaginal hysterectomy—always a troublesome operation on account

of the want of free space for manipulation—is rendered tenfold more difficult and dangerous when the dissecting away of the pelvic cellular tissue is undertaken. Mr. Mitchell Bank's principle—so satisfactory whenever it can really be carried out, as in the case of operations on the breast—can never be followed with precision in the deep recesses of the pelvic cavity.—*British Medical Journal*.

REMOVAL OF MICRO-ORGANISMS FROM WATER.—Krüger (*Zeit f. Hygiene*) considering the fact that more bacteria are usually present in rivers than in lakes, notwithstanding that lakes themselves in many cases are more or less polluted by rivers passing through populous towns, believes that this rapid decrease in the number of organisms may very possibly be due in part to the action of direct sunlight, but in the main to the tendency of water in a comparatively undisturbed state to deposit and precipitate. He therefore carried out a number of experiments with a view to determine how far the removal of organisms was brought about by the mere mechanical deposition of inert matter and also by precipitation as a result of chemical action. The mechanical precipitants employed, all in a state of fine powder and sterilized, were alumina, brick dust, clay, chalk, sand, coke, and charcoal. Water obtained from an ordinary service pipe was impregnated with a liquid containing a bacillus growth of a species incident to tap water. This was divided into two portions—one for precipitation with the inert substance, and the other was untreated for the sake of comparison. Experiments were similarly carried out in which precipitation was obtained as a result of chemical action such as is brought about by the addition to the water containing naturally lime, magnesia, etc., substances like wood ash, sulphate of alumina and slaked lime. The general conclusion come to by the author from the results obtained is that undoubtedly large numbers of bacteria are carried down by inert substances merely sinking in the water, but that the action is very considerably increased when, in addition to mechanical deposition, a chemical precipitation also takes place. The corollary is evident—inert substances do mechanically assist in the precipitation of micro-organisms, but preference should be given to chemical treatments. *Druggists' Circular*.

THE SPINAL CORD IN INFLUENZA.—At a meeting of the Royal Academy of Medicine, Turin, on May 23d, Professor P. Foà described the lesions which he had found in the spinal cord of a woman who died of influenza. The patient, who was "of middle age," had suf-

ferred from the usual symptoms, and the attack was followed by extremely acute bronchial catarrh, and later on by broncho-pneumonia on one side, with hepatization of the other lung. Sections of the spinal cord showed intense hyperemia, its substance being dotted with minute red points. On micro-copic examination, numerous hemorrhagic foci were seen in all the divisions of the cord, notably in the upper two thirds of the dorsal and the upper portion of the cervical regions. There was recent infiltration of red corpuscles among the nervous elements, which were slightly separated and compressed, but not visibly altered in structure. Some of the vessels were obliterated, and it was in the neighborhood of these that the hemorrhages had taken place. Degenerative changes were also present in places, the axis cylinders being hypertrophied to five or six times their ordinary size, and the nerve fibers degenerated. These degenerative foci were, as a rule, independent of the hemorrhagic patches, but in the highest part of the cord the two lesions were sometimes found together. The hemorrhagic foci were chiefly situated in the posterior columns, almost always at their periphery; the degenerative foci occurred mostly in the lateral columns. Neither the gray matter nor the posterior roots showed the least alteration. Dr. Foà thinks that the lesions were due to occlusion of vessels, giving rise in some places to hemorrhage and in others to alterations in the nutrition of the nerve fibers. He thinks it probable that the occlusion was caused by an accumulation of micro-organisms, but admits that he was unable to verify this conjecture. Examination of the brain was not permitted.—*British Medical Journal*.

MULTIPLE NASAL POLYPI.—A month ago Mrs. L., aged fifty-four, came to me with the following history: For ten years she had suffered from more or less nasal obstruction, and for six of those years she had not been able to breathe through her nose at all. She had, about eight years ago, consulted several doctors, some of whom removed a polypus or two, with forceps, in the usual way. She, however, experienced no relief, and the pain of the operation was so great that she had refrained from seeking advice since. Latterly, however, she had been able to "see something growing in her nose," which caused her uneasiness. On examination both nostrils were found completely blocked with a number of mucous polypi, and the finger passed up behind the soft palate detected a number of grape-like masses there. Having painted the nostrils with cocaine I removed, practically without pain, fifty-one polypi in all, with a Hilton's snare, the oper-

ation requiring six separate sittings. Practically there was no bleeding. The snaring of those which projected behind the soft palate was greatly facilitated by passing the finger behind it and pushing them forward. By using a Thudicum's speculum, forehead reflector, and gaslight, a very good illumination was obtained. The polypi varied in size from one fourth of an inch to three fourths of an inch, three being over an inch in diameter. After the last sitting the patient could breathe freely through each nostril.—*Dr. P. G. Lewis, London Lancet*.

CONGENITAL DEXIOCARDIA WITHOUT VISCERAL DISPLACEMENT.—Professor Grunmach describes a case of the above, which he maintains to be the first of the kind diagnosed during life, and also established by *post-mortem* examination. Of the cases hitherto described, some were not observed during life (Meckel, Abernethy, Brechet, Otto, Kundrat), and the rest were diagnosed during life, but not verified *post mortem*. In the present case there were defects of the cardiac septum and pulmonary stenosis, and during life peculiar cardiograms were obtained. The case was one of two of congenital pulmonary stenosis with septum defect, of which the cardiograms were shown at the Heidelberg Congress last year, the peculiarity consisting in this, that curves of the apex beat closely resembled radial pulse curves; and careful examination showed that the first elevation corresponded to the ventricular systole, the second followed closure of the aortic valves, while the third—a very slight one—indicated auricular systole. The patient, a boy aged fifteen, presented unmistakable physical signs of cardiac displacement, and a loud *bruit* over the second left intercostal space indicated pulmonary stenosis, assumed to be congenital from the gradual development of his symptoms from the second year of life; for the same reason a septum defect was assumed. Arrest of bodily development was an important symptom. The diagnosis ran thus: "*Dexiocardia congenita, sive situs viscerum inversus*; also congenital pulmonary stenosis and defects in the cardiac septum;" and this was fully verified *post-mortem*. It is surprising that the boy had lived so long, considering that a very fine sound could hardly be passed through the ostium pulmonale. The ductus arteriosus was obliterated. The diseased condition probably began during the second fetal month.—*British Medical Journal*.

EPIDEMIC PNEUMONIA.—In May and June, 1889, in South London, I had several cases of pneumonia, about twelve in all. Coming close together as regards time, four, also, being in one family, forced the conclusion on me that

they must be epidemic. The symptoms were those usual to pneumonia. Fever, basic lung inflammation, dullness, crepitation (generally spreading to the opposite side), a good deal of pain from pleuritic complication, spitting of blood, and a thick, glairy, tenacious mucus of a rusty color adhering to utensils, dyspnea, etc. Though of various ages, and some being in extreme danger at the time, they all eventually got well. To account for the cause of these cases at the time gave me a good deal of thought; but, after the experience of the winter epidemic of influenza, I have thought that they might have been probably in some way connected with that—a sort of mild epidemic as a forerunner of the more severe (in point of numbers). From my experience there is no doubt pneumonia is at times contagious or communicable, and I knew an instance where the facts strongly supported the idea that a medical man caught it while attending a case, and died, though there is great difficulty in proving such things.—*Dr. A. Brenchley, London Lancet.*

IS REMOVAL OF THE TONSILS DANGEROUS?—

Removal of the tonsils by the bistoury or guillotine is a popular operation in this country. The French are less partial to it, and MM. Quénu and Lucas-Championnière have recently dwelt on its dangers at the Paris Société de Chirurgie. The latter surgeon referred to two cases in Broca's practice where profuse hemorrhage followed removal of tonsils. In one of these instances the patient, a medical student, died almost immediately after one tonsil was cut, so violent and uncontrollable was the bleeding. In a case in Mr. Lucas-Championnière's own experience, the patient, a middle-aged man, had enlarged tonsils, quite free from inflammation, and he was not subject to any morbid condition liable to prevent the natural arrest of hemorrhage. On removal of one tonsil, hemorrhage took place, and could not be checked until after two hours of digital pressure with a tampon soaked in ergotine. M. Quénu always uses the galvano-cautery three or four times, at intervals of a fortnight, and atrophy of the tonsil always follows. MM. Marc Sée and Chauvel do not dread the knife. There can be no doubt that hypertrophy of the tonsils requires active treatment, especially in youth; the evil consequences of neglect are well known. In the majority of cases the risk of dangerous hemorrhage is very slight; but the possibility of its occurrence should always be borne in mind, and the use of ice or of a styptic gargle should be enforced as a measure of precaution immediately after the operation.—*British Medical Journal.*

PURE BALSAM OF PERU NOT A CAUSE OF NEPHRITIS.—The possibility that the administration of balsam of peru may result in nephritis has frequently been advanced as an argument against its continued use. Drs. Litten and V. Vámosy claim to have seen this unpleasant after-effect resulting from its use; and Nothnagel and Rossbach, in their work on therapeutics, distinctly state that the balsam of peru, when given internally in large doses, is capable of producing gastro-intestinal catarrh and inflammation of other mucous membranes. Landerer, and more recently still Drs. Bräutigam and Nowack, in the *Centralblatt für klin. Med.*, No. 7, 1890, who have conclusively demonstrated that the continued use of the drug, in an emulsion in oil or in pill form and in large doses, is not followed by any nephritic or other inflammatory symptoms, although the resorption of the balsam was shown by the strongly acid reaction of the urine. Drs. Bräutigam and Nowack claim that the untoward effects of the balsam upon the kidneys, as noted by other observers, was probably due to an adulteration or impurity of the drug.—*Deutsche Med. Wochenschrift.*

INTESTINAL CALCULUS FROM ABUSE OF VICHY WATER.—Dr. Loviot described before the Paris Obstetrical and Gynecological Society, last autumn, a case where he discovered a scybalous mass in the pelvis of a woman, aged thirty-two, who had been under his observation for over nine years. She suffered severely from constipation, and within five years spent 250 francs in the purchase of Vichy-water powder, besides drinking the powder in solution daily. She also took Tamar, and administered to herself enemata. Defecation became very painful, leaving the sensation—not an illusion in her case—of a ball pressing on the perineum. Dr. Loviot succeeded in partially breaking the mass down by means of a blunt curette; then it was easily extracted through the anus without any laceration of the sphincter. The mass was as big as a small orange, and very hard. The outer part consisted of dry fecal matter, infiltrated with salts. In the interior was a white calculous mass of salts. M. A. Guérin, in discussing Dr. Loviot's case, spoke of another where severe diarrhea was caused by the scybalous body. The mass itself was so hard that it had to be broken up by placing against it the end of an iron gouge, the handle of which was carefully struck by a mallet. With care the fragments were extracted without wounding the bowel or the anus. The diarrhea almost immediately ceased.—*British Medical Journal.*

The American Practitioner and News

"NEC TENUI PENNĀ."

Vol. X.

SATURDAY, JULY 19, 1890.

No. 2.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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ANTHROPOMETRY IN IRELAND.

The British Medical Journal says: "It is intended to make a systematic investigation of the measurements of the population in the various districts of Ireland. The Royal Irish Academy has voted a sum of £100 to a committee consisting of Professor J. D. Cunningham, Rev. Dr. Haughton, F. R. S., and Professor Hadden, M. A., to assist in the purchase of anthropometrical instruments."

This measure can not fail to be of great sociological interest, and it is to be hoped that it is the beginning of a movement that will result in a series of anthropometrical investigations carried on in every part of the civilized world.

Much has been said in our day of the degeneracy of man; and when we contrast the manner of life in this era with life as lived in classic times, we should suppose that the pessimistic moralist would find good grounds for his doleful conclusions. But, as a matter of fact, no such physical degeneracy exists as might be expected under the exigencies and amenities of modern life. The haste to be rich and consequent overstrain which make so many neurasthenics, syphilis, and intemperance in villainously adulterated liquors, with the decay of idyllic, and in a good sense of the word,

spiritual, life do certainly count against the average nineteenth century man. But these negative factors, bad as they may be, are not so potent in the way of physical and mental degeneracy, as were tyranny, superstition, wars of conquest, the absence of hygienic measures, bad medicine, famine, and pestilence in classic and medieval times.

The advantages of the man of to-day lie chiefly in his being able always to secure a plentiful supply of the best of food, with scientific hygienic appointments while well, and skilled medical attention when sick; while the manly arts are not suffered to fall into neglect.

One would suppose that life as lived in the days of knight-errantry would have been conducive to fine physical development, but it is a matter of fact that among the many suits of armor belonging to those times and preserved in the British Museum scarcely one can be found large enough to fit the average English man of to-day.

Thus it would seem that the law of the survival of the fittest, in spite of the doctor (whose influence is largely exercised in trying to promote the survival of the unfit), is, as the years go by, making better specimens of physical manhood, while it is to be hoped that in spite of the sordid lust for gain, the low tone of morals, and the evident decay of old-fashioned religion among us, the intellectual and spiritual problem is silently pushing toward a solution that shall satisfy the most hopeful optimist.

IS IT A NEW FORCE?—Elsewhere in this issue is a paper by our learned and philosophical contributor, Dr. D. T. Smith, relative to studies made with reference to the mysterious powers possessed by Mrs. Abbott, the Georgia wonder. Though not exactly medical, it is, at least, physiological, and so may fitly find place in a medical journal.

One of the editors of this journal, having been privileged to put this force to certain tests, we are happy to say that whatever hypothesis may be put forth to account for Mrs. Abbott's gift, there can be no question of her honesty, or of the absence of trickery, in every exercise of her power in our presence.

Notes and Queries.

CHOLERA IN SPAIN.—A sudden outbreak of cholera in the province of Valencia is alleged to have already caused no fewer than ninety deaths. Though the original reports have been confirmed by later telegrams, these do not seem to indicate such an extension of the epidemic as might have been expected; still we can not forget how, in the spring of 1885, the alleged reappearance of cholera in the same province was at first discredited. Dr. Candela, one of the leading physicians of Valencia, has visited Puebla de Rugat, and, from personal observation of most of the sufferers, has satisfied himself that the disease is cholera of the most pronounced type, and not an outbreak of common diarrhea of an unusually severe character. The epidemic appeared first at Puebla de Rugat, whence a large proportion of the population fled panic-struck to other places. The first case at Almáida was one of the fugitives, who died within twenty-four hours of his arrival. No fact in the etiology of cholera is better established than that the agents in its extension are persons who have imbibed the poison—infected persons, still able to travel, migrating to other, perhaps distant places, where the conditions of water supply and of the disposal of excreta are such as to permit of the contamination of the drinking-water. These “ambulant” cases being often of a mild type frequently evade observation, and, occurring at a season when ordinary diarrhea is prevalent, excite no suspicion at the time, and lend some support to the notion that the epidemic has advanced by leaps and bounds, or has been called into existence by local circumstances. It would seem that mild, so-called “sporadic” cases have occurred at Puebla de Rugat at various times for a month past. The constant communication that exists between all parts of the Mediterranean from Syria to Spain, which renders all attempts at quarantine utterly futile, and the fact that the province of Valencia has always been the starting-point of cholera epidemics in the Peninsula, would justify the assumption of its importation unobserved from Syria, where it has been smouldering since the return of spring. If, however, there be any foundation for the

official statement that the earliest cases at Puebla de Rugat appeared during certain excavations in the town, it is not impossible that the epidemic may be of home growth, for the climatic conditions of Spain are more like those of the tropics than those of northern and central Europe. We know that in India, though widespread epidemics are always connected with fairs and pilgrimages, there are, outside the area of Lower Bengal, where cholera is endemic, places where it recurs year after year under favorable meteorological conditions, and that troops on the march occupying camping grounds where it has previously prevailed are very prone to be attacked. Even in northern and central Europe the poison retains its vitality in the soil, and the disease reappears for two or even three successive years. There is really nothing unreasonable in the supposition that in the semi-tropical climate of southern and eastern Spain it may remain latent for twice that time. Yellow fever, also—which when imported into England and France has invariably undergone speedy self-extinction—has on several occasions shown a strong disposition to establish itself more permanently in Spain.—*Brit. Med. Jour.*

STANLEY'S TRIBUTE TO SURGEON T. H. PARKE.—In a recent address by Mr. Stanley, he said of Dr. Parke: “Surgeon T. H. Parke, A. M. D., was the latest of our volunteer officers who applied for membership in the expedition. He wrote with his own hands the terms of the agreement, the most comprehensive being ‘loyal and devoted service’ gratuitously. For some months he pursues his duties without attracting much notice from me; he is so quiet and unobtrusive. Finally, the increasing distresses to which we are subject increases the sick-list alarmingly. I am obliged to attend personally to the matter, which brings me more into contact with the doctor, and gives me better opportunities of observing his manner of work. Splinters pierce the feet through and through, ulcers break out like an epidemic, nostalgia creates a chronic sinking of the vital powers, hunger weakens them, dysentery saps their strength, fever enfeebles them, and various accidents occur, and each has its victims. Natives wound with arrows,

knives, and before many months I find that nearly all the men pass under the doctor's hands. His patients vary from twenty to fifty in number daily. For once anemia has firm hold of the constitutions, and the circumstances which caused the sickness remaining unaltered, except from bad to worse, the doctor's task never lessens. For months he has devoted his skill, his time, patiently and uncomplainingly, and always with a charming interest in his cases, until I have at last one hundred and twenty-four—a full one third of the expedition—unfit for further travel. I call the doctor and explain to him, and say, 'You have done well. I admit; but I wish more yet, if possible. Take these one hundred and twenty-four and cure them. How you will do it I do not know; but come this once. Every hour of the day give to them; see that their terrible wounds are dressed, that they have rations regularly, and that their food is cooked, etc.' Though they were a terrible sight when I left them in his charge, in one month over eighty are in prime condition and fit for active service, and a few weeks later there are only five incurably sick." He adds that Dr. Parke twice saved Stanley's life. Dr. Parke has been awarded the Honorary Fellowship of the Royal College of Surgeons of Ireland, which has thus shown a prompt appreciation of his work. The Khedive has conferred on him the Third Class Medjidieh. The Royal Geographical Society, at the Royal Albert Hall on Monday, May 5th, presented him, through the Prince of Wales, in the presence of a brilliant audience, with a medal which had been struck in honor of the services rendered to the cause of science and humanity; and the British Medical Association will present him with their gold medal for distinguished merit.—*Medical Record*.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION will hold its sixteenth annual session at Louisville, Ky., October 8, 9, 10, 1890. The medical profession are most cordially invited to attend, and papers are solicited. Titles should be sent to the secretary, Dr. E. S. McKee, 57 West Seventh Street, Cincinnati, as early as possible. The social arrangements are in accordance with the well-known hospitality of Kentuckians, and

the programme is already assuming proportions of magnitude and interest. An additional feature will be the meeting of the American Rhinological Association, October 6th, 7th, and 8th, at the same place. The secretary, Dr. R. S. Knode, National Bank Building, Omaha, Nebraska, will receive titles to papers.

AN INTERNATIONAL LANGUAGE FOR SCIENCE.—This question has been frequently discussed, and it will probably be ventilated again at the Congress. French is the language of the diplomat, and the French therefore urge their claim to have French chosen as the medium of communication between the learned men of different countries. We can hardly expect the Germans to accept this proposition. English has a claim for some consideration, but France and other foreign countries will put their veto upon our claim. Volapük has now a strong following, and this strange amalgamation of tongues offers itself as the solution of a difficulty. Considering the difficulties of the new language, we can hardly favor its pretensions. If we really require a special tongue for science, we should fall back upon the Latin. We have here a language with a history and a literature; and if it could be established that Latin was to be in the future the means of communication between learned men, then Latin would be taught in the schools of the world in a much more rational way than it is at present; and still more, those who intend to enter the medical profession would have to acquire a much wider acquaintance with its literature than is expressed by the first two books of Virgil or Cæsar, which represents at matriculation the acquaintance of the candidate with the *literæ humaniores*.—*Provincial Medical Journal*.

THE PULSE DURING CHLOROFORM ANESTHESIA: A CASE IN POINT.—Just at the present time it is important to compare the inductions of pharmacologists with the clinical experience of anesthetists in regard to chloroform, and hence the following case may be of interest:

On May 5th last I was administering chloroform to a boy, aged ten years, for tooth extraction, giving it on a piece of lint in the usual

way. After a few minutes, and before the operation was begun, I noticed that the pulse had become very weak, and was hardly perceptible. On suspending the administration the pulse rapidly improved, and in three minutes was fairly strong; on recommencing the anesthetic the phenomena were repeated. The pulse, on which I kept my finger, quickly became slower and weaker, and there was distinct pallor on the face. Again I discontinued chloroform, and again the pulse recovered. No distinct failure of the respiration was noted. Certainly there was none corresponding in any degree to that of the heart. I now sent for ether, and in about ten minutes began to administer this with a Clover's inhaler. The pulse immediately arose from 68 to 85, and continued full and strong. Extraction was now commenced and accomplished without further trouble. I am sorry I have no more exact records of the pulse and respiration rates, but I can vouch for the main facts, and my observations are confirmed by Mr. George Brunton, the dentist in this case, a gentleman of great experience and accuracy. I do not at all consider that there is any thing unique in this case; on the contrary, I believe it to be an illustration of what is familiar to those who have given a good deal of chloroform. When I was a student I was told to watch the pulse during chloroform anesthesia, and to believe that chloroform depresses the heart more than ether, and experience does not lead me to change my practice or belief in these particulars.—*Dr. J. Benjin Hellier, British Medical Journal.*

HYSTERICAL PERVERSION OF SENSIBILITY.—The Record for May has an account of an unusual case of hysterical sensory perversion, quoted from a recent clinic of Professor Leyden, of the Berlin Charité Hospital. The professor exhibited to his class the case of a young woman belonging to that class of hysterical persons who manifest an abnormal desire to have surgical operations, even of the most painful character, performed on them without any anesthetic being used. These persons, according to Dr. Leyden, not only do not experience pain, or they will not acknowledge it, but, on the contrary, that which in

others produces all the accompaniments of pain, produces in them pleasurable sensation. The young lady shown to the class was one who during a hysterical attack fell and injured her face, severing the facial artery and fracturing the lower jaw. The wound was sufficiently serious to require the deligation of both the facial and carotid arteries, besides the removal of a portion of the broken jaw. The patient readily submitted to the operations, but insisted on having them done without any anesthetic. And she afterward assured the surgeon that she experienced no pain, but rather great pleasure during the performance of the operation.—*Jour. Am. Med. Association.*

SUBSTITUTES FOR IODOFORM.—By the action of iodine on members of the phenol series in presence of an alkali, a number of homologous compounds can be formed, all of which have much the same therapeutical properties as iodoform. One of these, the iodide of diiodophenol ($C_6H_3I_2OI$), has been proposed by Mesinger and Nortmann, under the name of "annidamine," as an efficacious and inodorous substitute for iodoform. It is formed by heating together solutions of iodine in iodide of potassium, and of phenol in caustic potash, in the proportion of eight atoms of iodine to one molecule of phenol and four of potassic hydrate. There results a dark-red amorphous precipitate, which when dried forms a fine powder without odor, insoluble in water and dilute acids, but soluble in alcohol, benzol, and chloroform. Aristol, another of these bodies, is the biniodide of dythymol, and is formed by acting on a solution of thymol in caustic soda, with iodine dissolved in iodide of potassium. It is a reddish-brown amorphous body without odor, and apparently non-toxic. Aristol is insoluble in water and glycerine, slightly soluble in alcohol, and readily soluble in ether. It adheres well to the skin, and is very convenient for employment in the form of powder. It has been used by Eichhoff in lupus and psoriasis with good effect. *British Medical Journal.*

NOTE ON A NEW FORM OF PROTECTIVE GAUZE TISSUE.—Having found that the ordinary protective tissue prevented the absorption

of discharge beneath it, I asked Mr. Macmillan, a practical chemist in this city, to make some experiments for me with reference to a new form of tissue which would insure the gauze or other dressings not adhering to the wound, and still allow any discharge to be absorbed through it.

After numerous experiments with many forms of muslin, and various varnishes into which isinglass entered freely, we found that the best was coarse, pale book muslin, which is stretched on frames and soaked with a mixture of isinglass, glycerine, water, aniline solution, bichloride of mercury solution (1 to 4,000), and chloride of ammonium. When this is dry it is permanent and antiseptic. In using it, a strip the size of the wound and an inch in width is cut and dipped into a tepid solution of corrosive sublimate (1 to 2,000), and then applied over the wound with the ordinary surgical dressings above. Complete absorption of any discharge is allowed, and sufficient dissolved isinglass remains as a coating over the wound, which secures the non-adherence of the tissue and thus enables the surgeon to remove the dressings without any pain to the patient.

Having used this tissue for six months, and being thoroughly satisfied with its efficiency, and having had satisfactory reports from several surgical friends of their trials of it, I think it right to bring it before the profession.

The tissue costs half what the ordinary protective does, and may be obtained from the maker, Mr. John Macmillan, of Great Western Road, Glasgow, to whom I am much indebted for his labors in carrying out the experiments, and in perfecting this addition to antiseptic dressings.—*T. Crawford Renton, M. D., Ibid.*

In a circular on precautions against consumption, published by the State Board of Health of Pennsylvania, the following good advice is given :

"The duster, and especially that potent distributor of germs, the feather duster, should never be used in the room habitually occupied by a consumptive. The floor, wood work, and furniture should be wiped with a damp cloth. The patient's clothing should be kept by itself,

and thoroughly boiled when washed. It need hardly be said that the room should be ventilated as thoroughly as is consistent with the maintenance of a proper temperature."—*Times and Register.*

NEW HOSPITAL AT COOPERSTOWN.—The city of Cooperstown, N. Y., has received from an unknown donor the promise of \$10,000 toward the establishment of a hospital for that place. The donor, it is stated, suggests the unusual name, "The God's Providence" hospital, as an appropriate title. The name sounds oddly, and evades the teaching of a lesson that might be profitably taught, if it should bear the name of Man's Improvidence Institution. But he who gives the money should be permitted to give the name also.—*Jour. Am. Med. Association.*

THE will of Samuel Welsh, who died in Philadelphia, June 14th, contains bequests of \$50,000 each to the Trustees of the University of Pennsylvania and the Pennsylvania Hospital, and \$25,000 to the Episcopal Hospital in this city.

ANNIE F. REYNOLDS, the first woman dentist to graduate in Massachusetts, received her degree of D. D. S. from the Boston Dental College, June 19th. She also received the first prize for senior honors.

A BRASS TABLET in memory of the late Miss Alice Fisher, originator and for many years Chief Nurse of the Training School for Nurses at the Philadelphia Hospital, was unveiled, June 16th, at the Philadelphia Hospital.

It was reported, June 18th, that yellow fever had broken out in Malaga, the germs of the disease having been brought in a cargo of cotton by a New Orleans steamer.

A MONUMENT to the memory of Dr. Franz Anton Mesmer, from whom "mesmerism" derives its name, was unveiled at Dresden on May 26th.

THE fifty-eighth annual meeting of the British Medical Association will be held in Birmingham, July 29th, 30th, 31st, and August 1st.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., AUGUST 2, 1890.

No. 3.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

A REGIONAL STUDY OF TUMORS.*

BY W. L. RODMAN, M. D.

Demonstrator of Surgery, University of Louisville.

My subject, "A Regional Study of Tumors," is certainly a practical one, and one which at times is of interest to all physicians and surgeons.

Important as it is, there is not, it is strange to say, a treatise upon the subject in any language. I wrote to all the publishers of this country for such a book, if there was one, and received the same answer from all of them. I have not, after diligent search, been able to find even so much as an article in a medical journal upon the subject.

If writers would give the same attention to all of the important surgical regions as Dr. S. W. Gross gave to one of them—the mammary gland—order would in time soon come out of what is now little more than chaos. This short paper is simply written in the hope that some one worthier than I, feeling the same interest in the subject, will give it proper elaboration. Statistics are yet to be made. If the record-books of all hospitals and college clinics contained a full history of tumors, and the diagnosis in each instance, confirmed by a competent microscopist, it would not be long before we could in nearly all instances determine the nature of the neoplasm by the age of the patient, the situation of the growth, etc., before its removal.

Such knowledge would be a blessing to those surgeons who, while skillful with the knife, are not microscopists, and are oftentimes so situated that the aid of one can not be invoked.

The patient is entitled to a reasonably accurate prognosis—the relations often demand it; and no surgeon at all jealous of his reputation will give one, in the majority of instances, without availing himself of every means of diagnosis at hand. One may blindly predict that a tumor of the scalp is a sebaceous cyst, that one growing from the inner condyle of the femur is a sarcoma, and nearly always he will turn out right. The same would, to a less extent, be true of other regions prolific in morbid growths, if proper attention was given them.

I begin with the

SCALP.

By far the most common tumors of the scalp are the three forms of cystic tumors, viz., (1) cutaneous sebaceous cysts, (2) congenital dermoid cysts, (3) serous cysts.

1. Of these the first is much the commonest, and is popularly called a "wen." They are single or multiple. Prof. Gross saw a man with more than two hundred. They vary in size from a buckshot to an orange. They are more common in women than in men, 70 out of 107 consecutive cases reported by Bryant being in women. Unquestionably they are hereditary. Sir James Paget says "they are more commonly hereditary than any forms of cancer." They are more common after thirty years of age. The scalp over these tumors is either partially or wholly bald. Three fourths of all sebaceous tumors are on the head and face.

2. Congenital dermoid cysts are sufficiently often met with to be of interest. Its favorite site is about the eyebrow, at the outer angle of the orbit; it is also found over the frontal bone,

*Read at the May (1890) meeting of the Kentucky State Medical Society.

behind the ear, and over the anterior fontanelle. In the last situation a cyst of this kind has been mistaken for a meningocele cut off from the cranial cavity. They are deeply placed, usually attached to the periosteum, and by prolonged pressure may indent or even perforate the bone. This is especially true of those situated at the outer angle of the orbit.

3. Serous cysts are extremely uncommon. They are, according to Treves, "either (1) congenital, (2) formed from extravasated blood, (3) formed from a meningocele whose connection with the cranial cavity has been cut off." They are unusually small and situated over the occipital region. Billroth saw a cyst of this kind as large as the patient's head.

Vascular Tumors. Next in frequency to the cystic are the various forms of the vascular tumors or nevi. They are by far more common here than in any other situation. According to Haineke arterial angiomata are found only in this region.

Another interesting but rare form of vascular tumor is the venous, which communicates at times by one, again by several openings through the skull with the superior longitudinal sinus. Fortunately, they are extremely rare, and will be found in the middle line over the longitudinal sinus. Surgical interference is out of the question, unless it be to make systematic compression.

Before leaving soft tumors of the scalp the occasional existence of a meningocele or encephalocele is not to be forgotten. The most common situation is at the point where the four centers of ossification of the occipital bone come together. They also occur at the anterior fontanelle, above the nose, and in the parietal regions.

Solid tumors of the scalp are uncommon. They are lipoma, fibroma, general or circumscribed hypertrophy of the scalp, elephantiasis or, as some call it, pachydermatocoele, and sarcoma and carcinoma.

Lipoma, fibroma, and pachydermatocoele are all very uncommon. I have never seen an instance of either, nor are there many cases on record.

Sarcoma and carcinoma occur more frequently, but they too must be classed as rare affec-

tions. I have witnessed two examples of each. Both of the carcinomas were of the epithelial variety. This is the usual form of cancer. I find one case of scirrhus reported.

The bones of the skull may be the seat of ivory exostoses, ordinary or syphilitic. The former are more likely to occur on the outer and the latter on the inner table.

Sarcomata also grow from the bones, but, as a rule, begin in the pericranium.

PAROTID GLAND.

Tumors of the parotid are not uncommon. Gross gives the record of ninety-five cases collected by Billroth, Bruns, and Weber, the diagnosis in all instances being confirmed by the microscope. Adding to these two cases in my own practice, one of which was an enchondroma larger than a fist, removed four years ago from a man still living in Cloverport, Ky., the other a cyst, removed from a middle-aged man from Knoxville, Tenn., who presented himself at the University clinic, we have 29 enchondromas, 20 fibro-myxo-chondromas, 26 carcinomas, 9 of which were encephaloid, 10 epithelial, and 7 scirrhus, 6 fibromas, 6 cystomas, 4 melanotic adeno-sarcomas, 3 sarcomas, and 3 myxomas.

Taking the 29 pure chondromas, and 20 fibro-myxo-chondromas, and we have 49 or 50.51 per cent of all tumors of this gland of a cartilaginous nature. The cancerous tumors are next in frequency, comprising 26.78 per cent.

Specimens of mixed neoplasms are very frequent in this situation.

The benign tumors, which comprise 67.04 per cent, are movable, grow in early and middle life: the skin over them is not discolored, have little tendency to cause pain, and do not cause paralysis of the facial nerve. The converse is true of the malignant growths.

Sir William Ferguson, whose experience with these tumors has been larger than any other surgeon, says: "If it were evident that the tumor slid freely over the subjacent textures, I should not hesitate about using the knife, whatever might be the bulk of the disease; . . . but if the tumor seemed fixed, its limits not clearly defined, or an attempt to move it caused pain, I should not readily be induced to use the knife, however small the mass might be."

SUBMAXILLARY GLAND.

Enchondroma, fibroma, adenoma, lymphoma, and cysts are the benign growths most likely to be met with in this gland. Sir James Paget asserts that enchondromas are not so common in this gland as they are in the parotid—others claim that they are more so.

Of malignant neoplasms we find sarcomas, lympho-sarcomas, and carcinomas, the latter being rare and usually of the scirrhus variety.

SUBLINGUAL GLAND.

The only growth which frequently affects this gland is "ranula."

Epithelioma is the only form of malignant disease, and it is infrequent.

Calculus formations are rare. Gross, in his large experience, saw only one case.

Dr. Cheatham sent me a married woman, about forty-five years of age, from whom I removed a very large calculus found in a ranula. It was removed two years ago, and a part of the cyst excised. No recurrence to date.

AURICLE.

The tumors occurring in this situation are the fibro-elastic or keloid, fatty, sebaceous, hematoma auris, nevus, sarcoma, and epithelioma. Of these by far the most common is the first, or fibro-elastic tumor. It grows from the lobule of the ear, varies in size from a pea to a hen's egg, is very hard and dense, and of slow growth. It is most common in negroes, and is undoubtedly, in most instances, due to the irritation of heavy and irritating ear-rings. For this reason it is uncommon in men. Fatty tumor is very rare, though it has been found. The same may be said of sebaceous cysts, and also of sarcoma.

A very interesting tumor is the hematoma. It usually begins in the concha and spreads over the auricle. Dr. Hun finds that it is almost peculiar to the insane. In 24 cases 23 were in insane persons. Nevus is very rare. Epithelioma may occur in elderly persons.

LIPS.

Tumors of the lips are common. The most frequent is the small mucous cyst which is almost peculiar to the lower lip.

Next in frequency are the different forms of vascular tumors, and they are almost entirely limited to the upper lip.

Epithelioma is common enough. It is an interesting fact that this affection is nearly always situated in the lower lip. Of 560 analyzed by Gross, only 20, or 3.5 per cent, appeared in the upper lip.

In 150 of his own cases, Gross only saw it in the upper lip twice. Bryant places the relative frequency of the disease in the two lips as 25 to 1. I have never seen it in the upper lip. Epithelioma is by far more frequent in males than in females, the proportion being 17 to 1. It is rarely seen under forty-five, being pre-eminently an affection of advanced age. The theory so long fashionable, that it is caused by smoking short-stem pipes, is perhaps untenable. The majority of authors are against this opinion.

MAMMARY GLAND.

If tumors in other regions of the body had been studied and classified with the same care as those of the mammary gland, there would be little left to be desired.

S. W. Gross, who has written the best work in any language upon the subject, has made the simplest, and at the same time the most rational classification of these neoplasms, based as it is upon a sound anatomical and clinical foundation.

Of benign tumors of the mamma we find fibroma, myxoma, adenoma, and cysts, retention, and of new formation. While lipoma and enchondroma both occur in the para-mammary tissue, they do not occur in the gland itself, and will not be considered. Of malignant growths there are sarcomata and carcinomata.

The statistics collected by Gross show that of 649 cases of mammary tumors 530 were cancers, 57 sarcomas, 48 fibromas, 2 adenomas, and 12 cysts. So we have 81.66 per cent cancerous, 8.75 per cent sarcomas, 7.38 per cent fibromas, 0.30 per cent adenomas, and 1.84 per cent cysts, or over 90 per cent malignant, and 9.52 per cent benign.

Age has a most potent influence in determining the nature of a mammary growth. S. W. Gross says: "The non-carcinomatous growths occur, on an average, at the thirty-third year;

only 30.37 per cent develop after the age of forty." They develop during the activity of the gland; "15.55 per cent appear before the twentieth year, and 5.18 per cent before menstruation."

"The carcinomatous tumors develop, on an average, at the forty-eighth year; 77.26 per cent appear after the age of forty, and they are never met with before the twentieth year." So that these growths occur with the decline in function or atrophy of the breast.

Years between	Fibroma. Per cent.	Sarcoma. Per cent.	Myxoma. Per cent.	Adenoma. Per cent.	Carcinoma. Per cent.
10 and 20	11 or 22	8 or 13.33		2 or 11.11	
20 and 30	18 or 36	10 or 16.16	1 or 14.29	4 or 22.22	18 or 2.80
30 and 40	11 or 22	23 or 38.33		6 or 33.33	128 or 19.93
40 and 50	7 or 14	13 or 21.66	4 or 57.14	5 or 27.77	245 or 38.16
50 and 60	3 or 6	4 or 6.66	2 or 28.57	1 or 5.55	165 or 25.70
60 and 70		2 or 3.33			78 or 12.14
70 and 80					8 or 1.24
Cases.....	50	60	7	18	642

The above tabular statement of 777 cases is copied from S. W. Gross's work on Tumors of Mammary Gland, page 34.

The only tumors we find before the sixteenth year are the fibromas and sarcomas, the former occurring six times as frequently as the latter.

In conclusion, to quote still further from Gross, "Structural perfection of the mamma renders it most obnoxious to fibroma, sarcoma, and adenoma, while atrophy or decay predisposes it to myxoma and carcinoma."

A word as to the part of the gland which is invaded by the neoplasm. Carcinomas are usually situated at the upper and outer margin of the gland, and about the nipple. Non-carcinomatous growths are generally situated at the upper and inner margin of the breast, and but rarely grow around the nipple.

AXILLA.

Before enumerating the neoplasms which have their origin in the axilla, it should be borne in mind that abscesses both acute and chronic are frequently situated in this locality, also tuberculosis of the lymphatic glands. Aneurisms are not uncommon, and such surgeons as Symp, Dupuytren, Desault, and Ferraud have mistaken them for neoplasms. The result was fatal in every instance save one. Then again, the subclavian has been ligated

for a supposed aneurism, when the real trouble was a pulsating sarcoma.

The tumors met with in this situation are fatty, cystic, sarcomatous, and carcinomatous. The malignant are more common than the benign. Fatty tumors sometimes attain an enormous size; perhaps the largest on record being reported by Dr. A. H. Scott, of Arkansas. It reached below the ilium, was pyriform in shape, and when removed weighed twenty-one pounds.

Cystic tumors are frequently congenital, contents serous and coagulable. Notwithstanding the abundance of hairs in this situation, sebaceous cysts are almost if not entirely unknown.

Sarcomas originate in the connective tissues and also from the lymphatic glands. At first freely movable they soon become fixed. The superficial veins are prominent—tendency to ulceration is marked.

Gross claims "that carcinoma of the axilla is always the result of secondary involvement in connection with carcinoma of the breast." Erichsen recognizes the fact that scirrhus cancer may begin as a primary affection under the pectoral muscle or in the axilla.

I myself have seen a well-marked example of a scirrhus tumor in the axilla of a man beyond sixty years of age. The tumor was removed, but reappeared in three months. The patient lived in an adjoining State, and the subsequent history is unknown to me.

In the removal of malignant tumors in this situation the fact is not to be lost sight of that the attachments are deep, and that not infrequently the sheaths of the blood-vessels are adherent to the growth.

SHOULDER.

Tumors in the region of the shoulder may be divided into two classes, those beginning in the soft tissues around the joint, and those growing from the humerus, scapula, and clavicle. The former are almost invariably benign, the latter as certainly malignant.

Of the benign tumors growing in the soft tissues around the joint, we most generally find chondromas, fibromas, and lipomas. The former acquire an enormous size, often weighing twenty-five pounds, and, in rare instances, fifty.

Fatty tumors are common. They also may attain considerable volume. They are not so easily enucleated as in other situations, being at times quite adherent to the surrounding tissues. Two years ago I removed a large lipoma from over the shoulder of a middle-aged man. It was quite adherent to the surrounding tissues, requiring a tedious dissection for its removal. Cysts and erectile tumors are very rare, the latter, when they occur, are aneurismal or venous.

The one tumor which often springs from the bones of the shoulder is the small, round-celled or encephaloid sarcoma. It is exceedingly malignant. The points of diagnosis are rapid growth, apparent fluctuation, and prominence of the superficial veins. Of this frightful disease I have seen two instances, both in females. One a widow, twenty-two years of age, who fell upon the ice, striking her shoulder a severe blow. This was the starting-point of the sarcoma, which began in the head of the humerus. A spontaneous fracture of the bone occurred a few weeks before the limb was amputated at the shoulder-joint. This is not uncommon. The second case was in the person of a married woman, about forty-five years of age, whom I saw in consultation with my cousin, Dr. W. B. Rodman. This lady moved away from Frankfort, where she was then living, but I heard from her frequently. She survived less than a year. Enchondroma sometimes grows from the upper end of the humerus, beginning either centrally or subperiosteally. This, in fact, is one of the favorite seats of the chondroma. It is likely to undergo sarcomatous degeneration.

ABDOMINAL WALLS.

Tumors of the abdominal wall are usually of a fatty, fibroid, cystic, or sarcomatous nature. They may be superficial to or beneath the muscle—rarely between them.

Those superficial to the muscles are, as a rule, fatty. Sometimes these tumors, when situated near the middle line, may communicate by a small opening with the abdominal cavity. The possibility of this should be remembered. The slow and painless growth, lobulation, etc., render the diagnosis sufficiently easy.

In 1862 Nélaton described a fibrous tumor which he had in fifteen instances found growing

in the iliac fossa. The tumor was dense and inelastic, usually situated just above Poupart's ligament, and attached to the anterior superior spinous process of the ilium, or thereabouts, by a dense fibrous band. They are beneath the muscles, between the peritoneum and the iliac fascia.

Cystic tumors in this situation are rare. When existing they are deeply placed just external to the peritoneum. They are supposed to develop from the fetal urachus. They contain a serous fluid and attain a large size. They may simulate ascites.

Sarcoma is uncommon. In the few cases where it has been observed it is rather deeply placed, either between the planes of muscles or beneath them. Being malignant in character, they frequently form adhesions to the abdominal viscera.

In the removal of all tumors of the abdominal wall, more especially the deeper ones, as small an incision as practicable should be made, the muscles carefully stitched so as to prevent ventral hernia.

BACK.

Tumors of the back are benign and malignant—most usually benign. Fatty and fibrous are more frequent than others. Cystic tumors are rare. The peculiarity of both fatty and fibrous tumors of the back is that they are large and pendulous. The former grow from the superficial connective tissues, the latter from the deeper ones beneath the muscles. A fatty tumor weighing twenty-five pounds was removed from the back by Dover.

Sarcomas are rather uncommon, and when they do occur are apt to grow in the interscapular region.

Cancer is still more uncommon. When it exists it is of the epitheliomatous nature, and may spread over a large extent of surface.

GROIN.

Of tumors liable to occur in this interesting surgical region, the fatty, fibrous, cystic, and sarcomatous are the most common. Varix of the saphenous vein at its opening into the femoral may also occur. So may aneurisms of different kinds.

The fatty tumor of this situation may begin

above in the abdominal wall and descend into the groin. They are usually large and pendulous, and easily enucleated with little hemorrhage. The fibrous tumors are, as a rule, more deeply attached, and consequently difficult of removal. They may be attached to the vessels. There are no less than three different classes of cystic tumors liable to occur in the groin: (1) Retention cysts, as the sebaceous, which are rare. (2) Exudation cysts, as the enlargement of the bursa lying between the anterior surface of the capsule of the hip and the posterior surface of the psoas and iliacus muscles. This is by far more common, and at times undergoes great enlargement. (3) Cysts of new formation, either serous or sanguineous.

It is to be remembered, in connection with the diagnosis of tumors in the groin, that there are other "swellings" which are even more common than the tumors named. Acute and chronic abscesses which point either above or below Poupart's ligament, hydrocele of the cord, hernia, undescended testicle, aneurisms, tuberculosis of the lymphatic glands, etc.

A cystic or solid tumor situated over the course of the vessels will have an impulse imparted to it, and the tumor may be mistaken for an aneurism. Extreme caution is necessary for the correct diagnosis and removal of growths in this region.

SCROTUM.

Sebaceous tumors may occur, and are usually multiple. They vary in size from a pea to a hickory-nut. Sometimes there are great numbers of them.

Other cystic tumors are very uncommon. As a rule they are small and multiple.

Dermoid cysts containing bone, teeth, cartilage, etc., are congenital.

Lipomas are rare. When present they are usually of small size and feel like a third testicle. Kimball reports a growth of this kind weighing two pounds.

Fibrous tumors are uncommon. They occur after middle life and attain a large size. Gross, the elder, removed one weighing nearly five pounds.

Elephantiasis of the scrotum is uncommon in this country. Tumors of this kind have been

reported by Larrey weighing one hundred and twenty pounds, and by Delpcch, one hundred and sixty pounds.

Carcinoma of the scrotum is usually of the epithelial variety. It is so common in chimney-sweeps that it is often called the "chimney sweeper's cancer."

Sarcoma is rare.

TESTICLE.

This organ, like the female breast, is frequently the seat of morbid growths. The tumors commonly found are cystic degeneration, enchondroma, sarcoma, and carcinoma. Myomata, lipomata, and fibromata are reported, but are so rare as to make it unnecessary to consider them in a practical study of the neoplasms of the testis.

Given a tumor of the testicle, the chances are, as in the mamma, that it is malignant. Simple cystic degeneration sometimes, though rarely, occurs. The cysts are multiple and generally of great number, varying in size from a pin's head to a walnut. Contents watery or gelatinous. This is the "hydrated testis" of Sir Astley Cooper.

Cystic disease sometimes co-exists with sarcoma, chondroma, and carcinoma.

Enchondroma. The parotid and submaxillary glands are the only structures of the body more often the seat of this tumor than the testicle. It is liable to undergo sarcomatous change. It also co-exists with cystic disease.

Tuberculosis. This affection generally occurs in young subjects with evidences of tuberculosis elsewhere. Rarely is it limited to the testicle. It almost invariably affects the epididymis, and not the testis proper.

Sarcoma. This is the most common of all tumors. It is usually of the small, round-celled variety, the encephaloid sarcoma. It is impossible to diagnose this growth from the encephaloid carcinoma without the aid of the microscope. After a study of forty cases, S. W. Gross says that it affects younger subjects, even occurring in very young children, grows more rapidly, attains a greater volume, is more apt to invade the epididymis, more apt to cause enlargement of the inguinal lymphatic glands, but less apt to invade the cord than carcinoma.

Carcinoma. Most authors agree that the only variety of cancer found in the testicle is the encephaloid—the old fungus hematodes. It is most common about forty years of age, and is said never to occur in impubic subjects. It is invariably unilateral. Bryant and Holmes admit the possibility of scirrhus.

Tumors of the perineum must be extremely rare, as I find no mention of them in the standard works.

The only tumor I have ever met with in this region was a fibroma of many years' duration, in a man, sixty-seven years of age, whom I saw in consultation with Dr. H. M. Pusey. It was the size of an orange, and had grown very slowly. Six months before its removal it had taken on a more rapid growth, and the skin over its surface became discolored. A microscopical examination showed a limited amount of sarcomatous degeneration, the cells being of the small spindle variety. It was removed by Dr. Pusey two years ago, and, so far as I know, has not returned.

PENIS.

This organ is not often the seat of neoplasms. Benign growths, both cystic and solid, may occur, but they are so very rare that they need not be considered.

By far the most common growth is the carcinoma, and some authors claim that the only form of cancer to which the penis is liable is the epithelioma. It begins as a small wart or crack either upon the prepuce or glans penis. It soon ulcerates, and can be diagnosticated by the offensive sanious discharge, involvement of inguinal glands, pain, age of patient, etc. It is more common in elderly subjects. I have seen one case in a lad of fifteen, though it is uncommon under thirty-five. Erichsen and Corte have seen scirrhus of the penis. It was situated in the sulcus behind the glans.

Sarcoma is extremely infrequent. Dr. W. G. Porter, of Philadelphia, reported a case of sarcoma beginning at the base of the penis of a negro aged forty-four years. This is the only case I find.

NATES.

The tumors of this region are cystic and solid. Cysts are common, and are sometimes congenital. When congenital they may be so

large as to seriously retard labor. Puncture has been necessary so as to permit delivery of the child.

Fatty, myxomatous, fibrous, and sarcomatous growths are the solid tumors usually found.

Myxoma is perhaps the most frequent of all. It may assume the type of myxoma-lipomatodes. All of these tumors may begin on the outside of the pelvis and project into it through the great sciatic foramen, or begin on the inside and pass out. These tumors are deeply placed and their diagnoses before removal difficult.

POPLITEAL SPACE.

Tumors of this region are cystic and solid—more frequently the former.

Cystic tumors of this region are classified as follows:

1. Enlargement of some one of the natural bursæ.

2. Synovial cysts, caused by hernial protrusion of the synovial membrane.

3. Accidental cysts, serous or sanguineous.

The first class is the most common. Enlargement of the bursa situated between the inner head of the gastrocnemius muscle and femur is the largest and most common of these tumors. Next in order of frequency is the one situated between the tendon of the semi-membranosus and its insertion into the tibia. The bursæ on the outside of this space are smaller and less often enlarged.

Of solid tumors in this space we have sarcomas, fibromas, and lipomas. The sarcoma is most frequent. It frequently pulsates, and for this reason the femoral artery has often been tied for the relief of a supposed aneurism. The benign tumors are rare. Fatty tumors here often assume the form of myxoma-lipomatodes. The frequent occurrence of popliteal aneurisms and deep-seated abscesses in this region should make the surgeon extremely cautious in dealing with any tumor.

Dupuytren, Desault, and others have opened aneurisms in this situation under the impression that they were abscesses. I know of one such mistake necessitating ligation of the femoral artery.

Leaving the soft parts, we turn to the bones of this region.

The lower end of the femur, the condyles, and the upper end of the tibia are frequently the seat of enchondromas and sarcomas. Both of these diseases are more likely to grow from the inner aspect of the joint, the classical site of sarcoma being the internal condyle of the femur.

HANDS AND FINGERS.

Enchondromas, ganglions simple and compound, fibromas, lipomas, exostoses, sarcomas, and carcinomas are met with on the hands and fingers. Enchondroma is by far the most common. They are usually multiple, growing from the thumb and fingers, and producing great deformity.

Fibromas are less common. They, too, are as a rule multiple.

Ganglions are usually situated on the back of the wrist and hand over the extensor tendons. Fatty tumors are extremely rare, and when they do occur are situated deeply in the palm of the hand.

Exostoses are uncommon.

Both forms of malignant disease, sarcoma and carcinoma, are rare. Of the malignant growths epithelioma is the most common.

FOOT AND TOES.

The neoplasms of the foot are the lipoma, fibroma, ganglions, epithelioma, and sarcoma.

Fatty tumors are rare, and when found are usually in the sole of the foot.

Fibromas are also rare and generally situated at the posterior part of the sole, where they interfere very much with walking.

Ganglions are more common, and, as in the hand, are situated over the extensor tendons on the dorsum.

Epithelioma is more common than sarcoma, though both are rare.

LOUISVILLE, KY.

THE MANAGEMENT OF ABORTION.*

BY ANDREW SEARGENT, M. D.

There are but few practical every-day questions in medicine upon which so much honest difference of opinion is found as on the subject of this paper. The young doctor, who finds himself confronted with a case of abortion for the first time, can find a precedent for any course of treatment he may decide to pursue, and have respectable authority to confirm his decision. It is not the object of this paper to review the different opinions held upon this important question, but to offer the writer's reasons for the treatment he is about to recommend, believing this to be the best way to induce a free discussion of the subject by the members of this Society.

I shall include under abortion the early expulsion of the ovum—that is, during the first, second, third, and fourth months of pregnancy only—and refer exclusively to cases in which we have decided abortion to be inevitable.

Having determined that preventive or prophylactic measures have failed, or that they are useless, we find ourselves confronted with two dangers threatening our patients, hemorrhage and septic infection, the former to be controlled and the latter to be prevented.

The sudden termination of pregnancy presents different phenomena according to the period when the abortion takes place, and it is therefore highly important to distinguish the accident in the first two months from that occurring during the third and fourth months of gestation.

When abortion takes place during the first and second months, the ovum is expelled entire in a large proportion of cases without any rupture of the fetal membranes, and no interference is necessary. Rest should be enjoined, and ergot may be administered. In the more serious cases, as a rule, the sac is ruptured, and the whole or a portion of the contents being retained, the hemorrhage is more or less severe according to the amount of separation that has taken place.

In abortions of this character I believe it to

*Read at the May (1890) meeting of the Kentucky State Medical Society.

AN ANTI-PREATURE BURIAL SOCIETY.—The Medical Record states that a number of physicians and laymen are about to organize a society having for its object the prevention of premature burial, an occurrence which the promoters of the organization believe to be more common than is generally supposed.

be the duty of the physician to make a thorough and careful investigation, and take nothing that he may learn from the patient or friends as true until proven. I consider such a condition to be very serious and unsatisfactory, one that requires close attention and careful watching, while delay or expectant treatment is fraught with dangers, fears, and accidents that should not be permitted outside of a hospital.

If, upon making a digital examination, I find the cervix sufficiently dilated to introduce my finger, I make it a rule to completely empty the uterus before leaving my patient; that is, I adopt the so-called radical plan of treatment. If the cervix is too firm and the membranes can be felt protruding, or *in utero*, I administer chloroform, and forcibly dilate with my fingers until I can by bi-manual aid explore the entire endometrium and remove the ovum and membranes if necessary. I use my finger or fingers to remove the contents of the uterus in preference to any instrument that I know of. After this, and not before, I administer ergot, and feel assured that my patient is safe from hemorrhage, and infinitely safer from sepsis. The after-treatment is the same as that required for an ordinary puerpera. Protracted rest in the recumbent position is imperatively demanded.

But abortion during the third and fourth months of gestation is altogether more serious, because the placenta has contracted, at this period, many and very intimate adhesions with the womb, while the latter has not yet acquired all the contractility of tissue that it possesses at term. The placenta being relatively largest at this period and the womb relatively weakest, therefore abortion is attended with more profuse hemorrhage and greater danger of retention at this time. The fetus escapes more readily than the placenta, and if the abortion is left to nature, the uterus, being partially evacuated, retracts, the cervix closes up, and the symptoms frequently disappear for a time, while the placenta and membranes remain *in utero* for eight to ten or twelve days, even for three months, according to Cazeaux and Tarnier, who advise the expectant treatment until there are symptoms of septic poisoning.

I wish to enter my earnest protest against delay in the management of these cases, or the expectant plan so-called. It is an easy way, and in the great majority of cases it is successful, thanks to the *vis medicatrix nature*; but why wait for dangerous symptoms before active interference? It may then be too late.

When called the physician will usually find the os uteri partly open, and a portion of the placenta or membranes can be felt protruding from or imprisoned in the uterine cavity. It is then better to accomplish artificial delivery, and empty the uterus in order to avoid the dangers of a tardy abortion. In acting thus the future safety of the patient is assured. This can generally be done with the fingers. Sometimes the adhesions of the placenta are so numerous that it is impossible to destroy them without strong pressure upon the hypogastrium to depress the womb so that the forefinger of the other hand can be passed into its cavity, gliding between the placenta and uterine walls. If this does not succeed, chloroform should be administered, the hand passed into the vagina, the fingers into the womb, and every particle of placenta and membranes be removed. This, followed by the use of antiseptics and the administration of ergot, makes us masters of the situation at once, and enables us to say to patients immediately they are out of danger.

This active interference in cases of prolonged abortion by the aid of chloroform is not difficult, and if performed gently, as all intra-uterine manipulations should be, will do the patient no harm. On the contrary, she is spared the danger of profuse hemorrhage, which might occur in the absence of the physician. She is spared the risk of septic infection, general or local; she is spared the mental anxiety to which otherwise she is subjected by delay. She is also less likely to abort in future pregnancies, because the above treatment will be less liable to be followed by sub-involution, hypertrophy, or displacement of the womb.

Again I wish to go on record as advising the immediate removal of the secundines in abortion, as the proper course; generally easy and always protecting the woman from accident.

HOPKINSVILLE, KY.

REPORT OF TWO CASES OF CLEFT IN THE SOFT PALATE.*

BY M. F. COOMES, A. M., M. D.

Professor of Physiology, Ophthalmology, Laryngology, etc., in the Kentucky School of Medicine.

The first of these two operations was done on the person of a boy five years old and well developed in every particular, save that the soft palate was ununited, the cleft being complete in the soft structures, while the hard palate was unaffected.

The first operation in this case was done without chloroform, cocaine being applied to the parts. The boy was secured fast to Dr. F. Samuel, by the means of a bandage encircling both the patient and doctor. After many difficulties the freshened edges were united by the introduction of several stitches of silk ligatures. This was a bloody, torturing operation, and one that I will not try again on so young a patient without general anesthesia. The levator muscles of the palate were not cut, and the child was permitted to take fluid diet *ad libitum*. On the fifth day all the stitches were cut out, and the mother and father of the patient and myself were alike disgusted. After the parts had resumed their normal condition a second operation was done. This time, as before, I was assisted by Drs. Holloway, Marvin, and Samuel, and the patient was under the influence of chloroform.

The edges were freshened, and when well apposed were held in position by strong silk stitches; the muscles tending to separate the wound were cut, and the wound treated on this occasion as in the first operation. These stitches all cut out in four or five days, save the one in the tip of the uvula. The mother begged me to remove this, thinking that it was no good; but I declined, thinking there might possibly be chance of the wound uniting by granulation, which it did, and the final result was all that could be expected in such cases.

The second case was that of a young man, fifteen years of age, whose cleft was complete in the soft parts. He had been operated on during infancy, and the result was negative. The parts were cocaineized and the edges pared

and the cut surfaces brought together and held in position by seven large silk stitches. (The silk used in this case was No. 12.) Four out of the seven stitches remained, while three cut out. In both of these cases up to this time I had used the ordinary needles used for such purposes; and, to say the least of it, the task of closing a cleft in the soft palate with the old-fashioned needles is any thing but an easy or pleasant one. During first operation on this last case I determined to make a needle which would enable anybody to do this operation and to do it without the great annoyance and difficulty met with when the old-fashioned needles are employed.

The results of my labors in making a new needle for this purpose are better shown in the instrument itself than by any words that I can command. The instrument is nothing more or less than a steel hook with an eye in the end of the hook; the shank of the needle is flexible, so that it can be bent in any position in order that the hand may be kept out of the way while operating, and to enable the operator to reach any desired point in a wound or in any opening.

I have used these needles in one case and with the most gratifying results. I think that they speak for themselves, hence I shall have no further comment on them. I am fully confident that the larger the silk the less liability there will be of the stitches cutting out prematurely, and this is the great danger and one of the great causes of failure in these cases.

LOUISVILLE.

BISMUTH AND GONORRHEA.

THEODORE L. BENNETT, M. D.

Bismuth has long been employed as an effective agent in the treatment of chronic gonorrhea, and so it is in a certain class of cases; but we are too apt to overrate a good thing and fall into a mechanical way of using it; hence my remarks concerning the use of bismuth as an urethral injection.

A young man consulted me with a case of gonorrhea of about five weeks' standing. The disease responded readily to treatment, it being my custom to inject these cases at my office,

* Read at the May (1890) meeting of the Kentucky State Medical Society.

twice daily, with a solution of the nitrate of barium, sulphate of zinc, or nitrate of silver, according to the requirements of the case. This patient carried with him in addition a suspension of the sub-nitrate of bismuth, injecting it three or four times a day. I had discharged the case as cured, directing the patient to continue his injections of bismuth, when at the end of a few days he presented himself, stating that he had a stricture, had great difficulty in passing water, and suffered much pain in the region of the anus. On introducing a number twenty of the French scale no obstruction was encountered until the prostatic portion of the urethra was reached, when the sound abruptly stopped, inflicting much pain on the slightest pressure. After many attempts I was able to pass a number twelve soft instrument, which being withdrawn was found to contain bismuth, notwithstanding the fact that no injection had been used for five or six hours. That the bismuth had accumulated and caked in the deep urethra was verified on the following morning by the passage of "*something sharp*," which proved to be a small piece of hard bismuth much resembling egg-shell in appearance. A few passages of the sound and discontinuance of the injection gave complete relief in a few days. I do not believe the patient ever had a stricture, but give bismuth the credit for the entire trouble. Consequently I have discarded the use of the agent in urethral work, fearing the mechanical production of stricture, and seeing very well how such a foreign body as a fragment of hard bismuth being introduced into the bladder might form an excellent nucleus for stone.

LOUISVILLE.

THE MEDICAL QUESTION OF THE CENSUS.—The medical information required by the census has been the subject of much contention, and we fear that whatever statistics may be obtained will be entirely unreliable as a basis for any statistical generalization. If the authorities had contented themselves with ascertaining definite data regarding tuberculosis and cancer, instead of acquiring statistics regarding every transient disease, the result would have been more far-reaching.—*Physician and Surgeon.*

Societies.

ACADEMY OF MEDICINE AND SURGERY, RICHMOND, VA.

Stated Meeting, July 8, 1890, Dr. Wm. W. Parker,
President, in the Chair.

REPORT OF CASES.

Speech and Locomotion absent in a Child of Three and a Half Years of Age. Dr. J. N. Upshur reported a case of a child unable to walk or talk at the age of three and a half years, although apparently perfectly developed physically and, to a casual observer, as bright mentally as any child, in reality, however, being several months or a year behind the average. The expression of its face was a little more childish than the age demanded. There was, he said, a remarkable suppleness about the hip-joints, the child being able to abduct the lower limbs until at right angles with the trunk, or flex them until flat upon the abdomen. It possessed a good appetite, was perfectly well nourished, though constipated, and had resisted well two or three severe spells of illness. It had a remarkable aptitude for the appreciation of musical sounds. The child's teeth exhibited great irregularity in their manner of eruption—appearing here and there at haphazard around the dental arch.

The doctor knew of no cause for the state of affairs, except that the mother when pregnant with this child was subjected to considerable mental and physical worry on account of the illness of an older one. He would like to know the chances of its attaining the power of speech and locomotion.

Was the condition the lack of nervous power, and would benefit accrue from the use of electricity and massage?

Dr. Michaux: Had there been any convulsions?

Dr. Upshur: None.

Dr. C. L. Cudlipp: Were all the pelvic bones normal?

Dr. Upshur: Yes.

Dr. Michaux thought the case one of arrest of development from lack of brain or nervous organization, and that there was little chance for mental development under such conditions.

The President, Dr. Parker, thought a child of three years would learn to talk.

Dr. Geo. Ben Johnston believed the case, from the history, one of mild rickets, and was sure that by an active tonic treatment, in which the hypophosphites were involved, massage (particularly), electricity and strict attention to hygienic surrounding, much good could be done for the child's bones. He thought it would walk, and did not believe the inability to speak necessarily serious.

Veratrum Viride in Puerperal Convulsions. Dr. Parker reported having used in a case of puerperal convulsions, occurring two or three weeks before the expected time of labor (besides the usual plan of venesection and chloroform) tincture of veratrum viride, administering 14 gtt. early and afterward 5 gtt. every two hours.

Dr. Hugh M. Taylor, in consultation, recommended enemata of bromide of potassium and hydrate of chloral in large doses.

The patient was successfully relieved, but labor commenced two or three days afterward, and under chloroform she gave birth to a live child of eight months' gestation, large but feeble.

The doctor (Parker) had great faith in veratrum viride for the relief of convulsions.

Dr. Albert Sneed had recommended it in ten-drop doses every two hours.

Cholera Morbus rapidly Fatal. A Mr. V. summoned medical aid about 2 A. M. on Wednesday. By 3 P. M. on Thursday he was dead.

Before death the vomiting and purging became excessive, and a convulsive movement of the lower extremities manifested itself. The victim had been robust and perfectly healthy all his life, except for an anal fistula which developed some years ago. Dr. Parker had been the family physician, but being out of town another doctor was called, who reported the case to him.

Dr. Parker thought the action of the vagus had been inhibited by the intense heat—the man's work keeping him much in the sun.

Chloroform v. Opium in Intestinal Inflammations. A short time after V.'s death, continued Dr. Parker, his son was stricken down. After the first day or two of illness he complained of very little pain. The doctor, accepting the case only the day before death occurred, found him quiet, pulse 120, and temperature 101°; but, though there was no pain except upon deep pressure, it was then severe and the abdomen was re-

tracted—two bad features. Late the next day the boy was in collapse, death soon following. A *post-mortem* examination revealed the ascending colon pushed obliquely across the abdomen by the greatly distended and inflamed small intestines, which here and there showed adhesions and exudations (some as large as a fifty-cent piece) about to undergo organization. In fact, a severe general peritonitis had existed—a pint of pus being in the cavity of the peritoneum. The doctor believed the lack of pain due to the amount of morphine given by the physician first in charge. He objected to such large doses of the drug, and mentioned in connection a fatal case of intestinal inflammation to which he had been called at Old Point. The physicians called in before him had probably administered large doses of morphine. He found the man in collapse, perfectly quiet and indifferent. No amount of stimulation or other means used produced any reaction. He believed large doses of opium would not only prevent reaction but increase congestion. He thought the pain of these cases very largely due to spasms of the muscular layer of the bowel, and therefore would just as readily and much more safely be relieved by chloroform (by exhalation and internally) together with stimulants.

Dr. Johnston asked if there was any *debris* of food in the colon, particularly about the cecum in the *post-mortem* case mentioned.

Dr. Parker: None.

Irritation from Calomel and Castor Oil. Dr. Upshur believed there was something back of the opium in Dr. Parker's case. He thought the purgative action from large doses of calomel (such as 15 grains) and the castor oil following it would add to the irritation and congestion. The kind of congestion referred to by Dr. Parker would be aggravated by opium, but he considered the drug beneficial in passive congestions, such as occurred in the latter stages of typhoid fever.

Still-born Child Expected after Convulsions. Dr. Upshur was interested in Dr. Parker's case of puerperal convulsions because the child was born alive. He always expected a dead child after convulsions.

Examination for Uremic Symptoms During Pregnancy Imperative. Pilocarpine in Uremia.

The doctor believed it the imperative duty of every physician to make periodical examinations of the urine of pregnant women in his charge, and to inquire into the amount of water passed per day and the condition of head and vision. There might be double vision, intense headache, and scanty urine without albumen, and yet convulsions. He remembered a patient of his who complained of severe headache two weeks before confinement—no albumen being present and no impairment of vision. Just after completion of labor she was threatened with convulsions. The prompt and continued use of chloroform, however, warded off the attack. The skin was hot and dry. Bromide of potassium and pilocarpine were administered in repeated doses until a profuse perspiration was induced, with relief of head symptoms. Examination of urine now showed three per cent of albumen. The patient made a complete recovery. He mentioned another case in which he had the same experience with pilocarpine. He knew the objection to it—that it was depressing—but why object to it and recommend *veratrum viride*? For the immediate relief of convulsions he used morphia and atropia hypodermically, besides the lancet and chloroform.

Dr. Landon B. Edwards thought Dr. Upshur had given the true cause why some physicians had so many cases of puerperal convulsions.

The maxim of Dr. Owen, of Lynchburg, was, watch the woman as you would the training of a child. Though convulsions did not always follow the symptoms, yet those symptoms should be accepted as warnings.

As a prominent symptom he mentioned the morbid appetite in the latter stages of pregnancy. First quiet the alarm of the patient, then direct attention to the kidneys. He, too, highly recommended pilocarpine if the patient was strong enough to cough up or call attention to the accumulation that would occur in the bronchial tubes. If a convulsion occurred she might drown then.

Erratic Pain in Labor. Dr. Johnston had been called, fifteen or twenty days before her expected delivery, to a woman, the mother of four children (good labor each time), who complained of a severe pain, paroxysmal in character, oc-

curring on the right side of the neck and extending down upon her chest to the margin of the axilla. The doctor, suspecting the approach of labor, asked an examination, but was refused. Early the next morning he was called again, and found the child born. The pains had increased in length and intensity, the intervals growing shorter, until there was suddenly a gush of waters, the birth of the child immediately following. The woman hadn't a single uterine or abdominal pain, and did not in the least suspect the real condition of affairs.

Dr. Parker: Was the woman intelligent?

Dr. Johnston: Very.

Dr. Parker: Was she of neuralgic tendency?

Dr. Johnston: No.

Scirrhus of the Rectum in a Child of Thirteen Years. Dr. Michaux had been treating a child of thirteen years of age for ulcerated rectum for some time, with no benefit. He decided upon an examination of the parts, which he made with the patient under chloroform. About two inches above the anus he found a band of two and a half inches in width, nearly closing the caliber of the bowel. It was hard to the touch, but tore upon pressing the finger through it. There was some inguinal enlargement. Every motion of the bowels caused violent pain, and this examination induced so much as to necessitate the use of opiates. The general appearance of the boy suggested malignancy, and the doctor believed it such, though he had never seen or known of a case in so young a subject.

Dr. Parker: Any sanious discharge?

Dr. Michaux: Some mucus and pus, probably from inflammation around the growth.

Dr. Upshur: Was there a history of chronic constipation?

Dr. Michaux: No.

Dr. John R. Wheat: Any history of syphilis?

Dr. Michaux: No.

Dr. Upshur: Any history of dysentery?

Dr. Michaux thought not, except that depending upon the present trouble.

Dr. Upshur: What was the character of the pain?

Dr. Michaux: Very acute.

Dr. Upshur: Much pain at night?

Dr. Michaux: No.

Dr. Upshur, refusing to believe in malignancy at that age, thought Dr. Michaux would find that some previous proctitis had produced the band of lymph present, or that there was some history of syphilis back of the trouble. He had seen such a case in a woman of decided syphilitic history, there being acute pain upon defecation. He performed repeated cuttings and dilatations. Her health ultimately gave out, death following. He would suggest alternatives, such as iodide, iron, etc., and nutritious but fluid diet. The rectum might be washed out with warm water and boracic acid. The pain could be relieved by suppositories, medicated with cocaine or enemata of glycerine and cocaine.

Dr. Wheat thought Dr. Michaux had better look after a probable syphilitic history. He related two cases of his own. He had found that a constitutional treatment, involving potassium iodide particularly, gave decided relief. Though the trouble returned, this treatment relieved it each time. He had no faith in operative measures; in such cases he had tested that plan.

Dr. Michaux had neglected to say the child's grandfather had died of cancer. He would, however, take advantage of the encouraging suggestions. He would obtain some of the growth for microscopic examination.

[Since the above meeting Dr. Upshur found, upon stripping the little girl of three and a half years, whose condition he reported, that there was a uniform atrophy of the muscular system. He has given her the benefit of massage and electricity for ten days. Improvement has manifested itself by the more ruddy appearance generally and the toning up of the muscles.]

J. W. HENSON, M. D.,
Reporter.

Reviews and Bibliography.

Practical, Sanitary, and Economic Cooking, adapted to Persons of Moderate or Small Means. By MRS. MARY HINMAN ABEL. (The Lomb Prize Essay.) 182 pp. Price, paper, 35 cts.; cloth, 40 cts. Published by the American Public Health Association. 1890.

It is customary to write cook-books in somewhat the same way as many authors get up works on therapeutics. They bring forth from the treasures of the closet, or rather from the treasures of the closet cooks, things both new and old, the old being too often found there by a rule adopted by some housekeepers of holding on to a thing seven years and you will have use for it. As a consequence the very people who need the information such books ought to give are left in a state of bewilderment almost painful. They are offered an unlimited number of recipes, but no guide by which to choose.

But here we have a new departure in cook-books, a book which stimulates thought and encourages discriminating study of the problems connected with the preparation of food. It treats of cooking, not only with regard to the pleasures of the palate, but in an especial manner to the needs of the system and the providing ability of the individual.

The book is supplied at a cheap rate for the use of the million, in the same benevolent spirit that led to its production, and with justice and emphasis it can be said that it ought to be in every family.

D. T. S.

Stories of a Country Doctor. By WILLIS P. KING, M. D., Member of the American Association; Ex-President of the Missouri Medical Association, etc. With illustrations by T. A. Fitzgerald. 397 pp. Kansas City, Mo: Hudson-Kimberly Publishing Co. 1890.

It was no enemy's prayer that led to the writing of this book. At all events, if such was the case, that enemy is writhing in the cramp colic of disappointment, for his prayer, like Rory O'Moore's dream, has gone by contraries.

If the man who makes two blades of grass grow where one grew before is a public benefactor, then the man who can make hay out of

AN EDITORIAL CHANGE.—The editor of the American Journal of the Medical Sciences, Dr. I. Minis Hays, will sever his connection with that journal after the issue of the July number. The Drs. Hays, father and son, have been identified with that publication for sixty years. Dr. Edward P. Davis will succeed to the editorial chair.

thistles, who can make a lawn out of the thicket, and bring sunshine through the clouds, is more than a benefactor. Just such a task and many more has Dr. King shown himself here capable of performing. With a fine sense of humor the author discovers a superior intellect, enabling him to look from above on the foibles and weaknesses of men, a quality indeed without which one can not touch the short-comings of men without giving pain.

The work ought to sell, because it is entertaining, because it is good, because its author is a doctor, and because he wants to make money out of it.

D. T. S.

P. S. This notice might have been fuller, but our copy has been in such demand by borrowers that we have lost the run of it. S.

Protoplasm and Life: Two Biological Essays. By CHARLES F. COX, M. A. 67 pp. New York: N. D. C. Hodges. 1890.

The aim of the author in this not very intelligible work is to show that there is or has been more or less confusion and inconsistency among scientific writers on the subject of the primordial basis of life or protoplasm, and that spontaneous generation must be demonstrated before the doctrine of evolution can logically demand acceptance. With him it is not the gap between man and the ape to which belongs the "Missing Link," but to that between lifeless substances and living forms. The writer enlivens his pages with some good quotations, but on the whole it is a book to be read by his friends.

D. T. S.

Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Scientific observation is bringing more and more to light the value of milk in the treatment of many serious diseases, not only as a food, but as a medicament, and the great dangers to which the public are exposed by the adulteration or dilution of this valuable product. In lactose and glucose two new medicaments are coming into vogue which appear likely to prove of permanent value. It has

been proved, as the result of a number of direct experiments, that both lactose and glucose are active diuretics, belonging to the group of direct renal diuretics, for they do not appear to affect the pulse, nor do they appear to pass into the urine. They are destroyed in the system, and so, in addition to their diuretic qualities, they act as food. Neither of these forms of sugar produce any nervous disturbance, in this respect proving themselves to be preferable to caffeine. The diuresis produced by lactose and glucose is greater than the amount of liquid drunk, therefore it is concluded they produce a dehydration of the blood, and to that extent render it more apt for absorption. However, when albuminuria exists, though diuresis is produced, it is not in so marked a degree as when albumen is absent. The diuresis reaches its maximum in cardiac dropsy, when the urine is free from albumen.

Lactose in doses of about three ounces, dissolved in two quarts of water, produced marked diuresis, while six ounces of a seventy-five-per-cent syrup of glucose is found to produce the maximum effect. The efficacy of the "grape cure" is believed to be due in a great degree to the diuretic effects of the glucose contained in that fruit. In the case of a man suffering from fatty degeneration of the heart, arterial sclerosis, and ascites, digitalis produced but a slight effect, while lactose in doses of three drams to four and one half drams daily produced a three-fold increase in the quantity of urine voided in the twenty-four hours.

English women have been distinguishing themselves at foreign as well as their own universities this year. During the session which has just come to an end, the University of Brussels has conferred its M. D. degree on three English women students, who are all certified to have passed with honors. Dr. Jane Harriet Walker (who also wore honors in London and Vienna) is physician for outpatients to the new hospital for women. Dr. Julia Cock holds a similar appointment, besides being medical inspector of the North London School, and the third, Dr. Agnes Henderson, hails from Aberdeenshire.

At a recent medical meeting some interesting calculations relative to the speed of thought

were given. It was stated that a pianist in playing a presto of Mendelssohn, played 5,595 notes in four minutes and three seconds. The striking of each of these it was estimated involved two movements of the fingers, and possibly more. Again, the movement of the wrists, elbows, and arms could scarcely be less than one movement for each note, as twenty-four notes were played each second, and each involved three movements, there would be seventy-two voluntary movements per second. Again, the place, the force, the time, the duration of each of these movements was controlled. All these motor reactions were conditioned upon a knowledge of the position of each finger of each hand before it was moved, while moving it, as well as the auditory effect to force and pitch, all of which involved at least equally rapid sensory transmissions. To this must be added the work of the memory, the placing of the notes in proper position, as well as the fact that the performer at the same time participated in the emotions the selection describes, and felt the strength and weakness of the performance, a truly bewildering network of impulses coursing along at inconceivably rapid rates was arrived at.

The value of whitewash in destroying infection has been investigated. The experiment was tried on the microbes of cholera, typhoid, earbuncle, and tuberculosis. Portions of the walls of a room were infected with the various microbes, and covered with a coat of whitewash, the room being closed hermetically for twenty-four hours. It was then found that the whitewash effectually destroyed the cholera and typhoid bacillus, but the microbes of the other diseases survived several repeated applications.

Providing new noses is quite an art in the district of Kattywar in the Bombay Presidency. Cutting off an enemy's nose is the favorite mode of vengeance throughout the state of Junagadh, where jealous husbands inflict the same punishment on their wives. Sometimes the nose is bitten off and part of the lip will be taken also. A Hindoo doctor at the Junagadh Hospital has had so much practice in mending noses that now he can restore the injured feature in a most wonderful manner leaving very little

disfigurement. He has performed one hundred successful operations in "rhino-plasty."

At St. Mary's Hospital there has been a cure of simultaneous fracture of both clavicles, which has attracted much interest on account of the extreme rareness of such an injury. The patient, a woman aged fifty, was going down some steps, carrying in one hand a pail of water and in the other a jug; she tripped, and in falling dropped the pail and jug and put out both hands to break the shock. When admitted to the institution it was found that she had sustained a simple fracture of both clavicles, the fracture being in a similar position on either side—about the junction of the middle and outer thirds, with the usual displacement of the outer fragments. In order to rectify the malposition, a figure-of-eight bandage was first tied round the shoulder, later a handkerchief round each shoulder was tried, tied together behind, as recommended by Syme. Neither plan succeeded, the patient being too restless. Nothing else was tried, she simply being kept on her back. At the end of a month from the date of the accident there was firm union on both sides, with no unevenness on the right, but considerable displacement of the left clavicle.

It is proposed to hold an International Congress of Hygiene and Demography in London in 1891. Six congresses have already taken place, biennially as a rule, in various cities of Europe, when delegates from all parts of the world have attended. A meeting under the presidency of the Lord Mayor has been held at the Mansion House, when a resolution was passed expressing entire approval of the objects of the congress and of London being visited next year. A subscription list was opened to provide funds for defraying the expenses.

Professor Ray Lankester has been elected to the post of deputy and acting Professor of Anatomy in the University of Oxford.

Thiol, a substance very like ichthyol, but without its unpleasant smell, has been used in a large number of skin diseases with remarkable success. The part affected is painted with a solution in distilled water of one to four twice a day, the application not to be washed off for two or three days.

LONDON, July, 1890.

Abstracts and Selections.

ON THE CONSTRUCTION OF SMALL LYING-IN HOSPITALS, WITH REFERENCE TO SEPTIC INFECTION.—The subject to which I invite your attention to-night was suggested to my mind several months ago by a conversation with members of the staff of the Woman's Hospital.

You are all aware that this institution has in contemplation the erection of a new building, in which shall be the best modern arrangements for the care of pregnant and lying-in women and their offspring.

The question was discussed among some of us as to whether it was advisable to put up a pavilion separated from the main hospital, in which all cases of so called "puerperal fever," etc., might be placed, or whether isolating rooms might not be arranged in some part of the building itself.

My own opinion has been that the pavilion system, while admirable for general hospitals and barracks, is wholly unnecessary in small lying-in institutions; and I have thought that the discussion of this subject, although perhaps somewhat hackneyed, might not be wanting in interest and profit to most of us.

In the case of the Woman's Hospital the question of expense is an important one. The main building must be as complete and perfect in its arrangements as the funds will allow, and the erection of a pavilion, which, at most, would probably not be used over two or three times a year, would necessitate the further expenditure of several hundred dollars.

As this question of expense, however, does not particularly concern us, I shall pass on to the discussion of the main point—septic infection.

Up to within the last forty years, one of the most prevalent and fatal scourges known to affect human beings was the so-called "puerperal fever." Woman after woman died the civilized world around, until, in some localities, a time was reached when it was little less than suicidal to become a mother. In those days the profession went about in mourning, as it were, helpless, hopeless, and utterly unable to account for or cope with the terrible distemper. Here and there during this somber period, feeble points of light appeared in the darkness of night, flickered, cast a waning halo, and went out.

In 1770 White saw in lying-in hospitals the habitat of "puerperal fever," and traced its source to foul matter generated in the individual's organism, or conveyed there by the putrid-laden air.

The celebrated Gordon, of Aberdeen, advanced still stronger opinions not many years

later, and here and there like theories were stated.

In 1848, however, the blow was struck that opened the eyes of the profession to new light, but even for years afterward its vision was dimmed, but it saw not clearly—but "men as it were trees walking."

It is unnecessary for me here to rehearse the achievement of that great man and keen observer, Semmelweis. You all know of his struggles, victories, failures, and final death; of the criticism, ridicule, and contumely heaped upon him by his fellow countrymen and others. So great was the aversion to Semmelweis' theory, so against nature for man to accept the dictum that the mischief was owing to his own dirty fingers or unclean instruments, that I believe, had it not been for the uncontrovertible experiments and tests of Pasteur, Tyndall, and Lister, even with the clearly enunciated propositions of Semmelweis before our eyes, we should to-day still be groping in the dark.

It is to guard against this same "puerperal fever" that the pavilion isolation of patients was introduced first, I believe, by Tarnier. By granting that isolation in such cases is desirable or even necessary, we acknowledge that the disease is contagious and liable to become epidemic. But in order to clearly understand the philosophy of isolation, and the treatment of the condition, we must not fail to appreciate what the disease really is; and, as the term puerperal fever means pyrexia in a lying-in woman, we must drop it from our vocabulary as having no etymological significance in describing the disease or diseases which we have in mind, and apply right names to the conditions present. "For," as Robert Barnes has recently said, "as fevers of various kinds may assail non-puerperal persons, so they may assail puerperæ. We must abandon the attempt to find one definite puerperal fever, and we must recognize the clinical truth that there are puerperal fevers."

The investigations of a large number of observers have now placed it beyond dispute that the disease so fatal in the past, and so dreaded by every accoucheur, was no other than blood-poisoning, surgical or wound fever, septic infection.

These observations have also shown that the source of the infection is direct, that is to say, from external sources which can be traced, or indirect, also called auto-infection, where the source is from within the organism but which it is not always possible to locate or explain.

The number of believers in self-infection is, however, gradually decreasing year by year, for the real cause of infection has been indisputably proven to be nearly always introduced from without.

I say nearly always, for there is a class of cases, namely, those in which the woman suffers from disease of the uterine appendages where the infection may and does originate within the organism. This condition has been admirably described by Grigg, who believes that puerperal disease from such source is far more frequent than is generally supposed, the paucity of *post-mortem* examinations on women dying in childbed being responsible for this. The stand taken by Kaltenbach, who is an advocate of self-infection, is that the microbes which exist in the genital secretions before labor develop their energy or virulence after that act has taken place.

Now, as Winter and others have found in the vaginas of healthy women staphylococci and streptococci, etc., the same organisms, and indiffereniable from those found in septic peritonitis, metritis, etc., and which (streptococci) Legrain has also discovered in the vagina of a syphilitic woman suffering from subacute vaginitis, it is difficult to understand how these germs can acquire their virulence unless from some external source. As a matter of fact, Szabo has shown that the nearer to the external world the parturient canal is injured the more frequently does puerperal disease result, a point hardly in favor of the auto-infection theory. Moreover, in cases where the disease originates higher up in the genital tract—as most of the micro-organisms are found in the lower third of the cervix and vagina, and have no power of locomotion—it is hard to account for their presence above unless we grant that they have been carried upward on fingers or instruments. As far as the ordinary lying-in case is concerned then, we may at once concede that all her dangers from septic infection lie from without; that though she may be a hot-bed for the generation of germs, if these germs have not become contaminated by outside matter, she is practically safe.

"Thomen investigated the lochia of normal puerperæ (seven cases) and found that—

"1. Vaginal lochia contain, in normal conditions, innumerable germs of different kinds (Doderlein). In three cases streptococci were found in the vagina.

"2. Micro-organisms are more numerous in the vicinity of the introitus than in the upper third of the vagina.

"3. The number of micro organisms in the vagina is considerably larger during the first days of childbed than immediately following labor. (During menstruation the number of bacteria is larger than before.)

"4. Lochia from the cervix was sterile in two cases; in one case the number of bacteria was exceedingly small; in two more incon-

siderable, while in another they were abundant.

"5. Lochia from the *cavum uteri* was sterile in four cases, but in the remaining three there were different micro-organisms—among which the streptococcus was found twice. (*Archiv. für Gynäkologie*, Band xxxvi, Hefte ii, p. 231.)"

From this it is obvious that the first duty of an institution is to protect its patients from infection. This result can be obtained only by the most careful observance of cleanliness—cleanliness of the building in general, but particularly of the lying-in room—the accoucheur, the nurse, the clothing, instruments, and utensils employed, and last, but not least, of the patient herself. To aid in this we make use of antiseptics; but as I have already presented this subject for your consideration I will not dwell on it at the present time. Without the most scrupulous care in all details the most perfect architectural design in building would avail little or nothing. As soon as a patient develops septic infection, or any disease which is known to be contagious, she should be isolated. Now the statements which have already been put forward to make it plain that isolation means simply separation—that is, out of contact. I hold, therefore, that a patient placed in a room separated by a plastered brick wall from other lying-in women is as isolated as if placed in a pavilion, provided all contact between the sick and the well can be prevented. In the discussion of this subject I refer only to small maternities, where not more than fifty to one hundred women are delivered annually. This may be readily accomplished by having all doors of communication between the two parts of the building on another floor, or at least on another hall, and prohibiting nurses in attendance on sick puerperæ from visiting or coming in contact with other nurses or well puerperæ. Utensils, instruments, washing, etc., should also be disinfected and cleansed by themselves.

The walls of lying-in rooms and hospital wards, or isolating chambers, should be well plastered and painted, and the floors constructed of well-matched hardwood lumber, to admit of thorough washing and disinfecting. As little furniture as practicable should be in any of these rooms, and all upholstery, hangings, etc., entirely done away with. Water-closets should be placed as far as possible from maternity and lying-in wards, and should be frequently inspected to insure their sanitary condition. The ventilation should be as perfect as possible, and to assist in this an open fire-place in each room is recommended.

Light, air, and cleanliness, these three are the *sine qua non* in the prevention of septic infection, and the greatest of these is cleanliness.

But it was not my intention in preparing this paper to enter into a discussion of architecture. I had in my mind simply the idea that unless the cases in any maternity are conducted on what is known as the modern antiseptic midwifery principle, pavilions and isolating rooms will be built in vain, for, as Kucher has so sensibly remarked, "immunity from puerperal fever does not depend upon location, but on the care taken to prevent septic contact."

Appended are paragraphs taken from the letters of several distinguished foreign teachers of midwifery which I have received since commencing this article:

Professor Credé, Leipsic: I am certain that infected patients can lie beside and be cared for along with healthy puerperæ without infecting them, providing all contact between the sick and well can be wholly prevented—that is, I believe the common atmosphere to be devoid of danger, and only the direct contact of their secretions on new and fresh wounds in the healthy to produce infection. As it is, however, impossible for attendants to absolutely avoid such contact, it is prudent to place the sick in partly or wholly disconnected rooms, and to provide them with entirely separate nurses, and especially washing, etc. In my institution the hospital department was arranged in this way in the third story of the building.

Professor F. Winckel, Munich: I allow all puerperal patients, excepting those affected with *puerperal erysipelas*, to remain with the healthy lying-in women. Separation in these cases is unnecessary; those affected with *erysipelas*, however, must positively be placed in a separate room—and best in a separate building.

Professor Olshausen, Berlin: The safest way is, of course, to place the sick puerperæ in a special building, pavilion or barrack, and I would strongly recommend this in planning a large hospital. Yet undoubtedly it is quite sufficient if the sick puerperæ remain in the same building but separated as far as possible, and the attendants kept from the well puerperæ. It is so in Halle, where the sick puerperæ are removed to the gynecological department. In Berlin they are taken to the separate station.

Professor Leopold, Dresden: In my clinic there are three different lying-in rooms, two for healthy women only, and one for the sick, that is, such as are received infected into the clinic. These latter are at once placed by themselves and are delivered by a special physician and midwife. Although these three lying-in rooms are in one large building, it would be better if the sick, that is those infected, could be placed in a small separate pavilion, where they could be delivered and afterward remain. Having the lying-in rooms in the same building saves

much time for physicians and midwives, but the danger of contagion is very great, and the isolation of attendants is maintained only at the expense of great pains. I would therefore recommend that besides the lying-in room for healthy parturients, there be also a pavilion in which all sick patients be confined.

Professor Alexander R. Simpson, Edinburgh, believes that it is the best arrangement to have a ward for puerperal cases apart from the main building. Edinburgh maternity does not possess this advantage, but in cases of a suspicious nature the patient is, of course, isolated in a special room in the building.—*Dr. W. P. Manton, Physician and Surgeon.*

ETIOLOGY OF CHOLERA INFANTUM.—Passing by such predisposing causes as age, constitutional feebleness, bad hygienic surroundings, impure air and water, dentition, etc., there remain two causative factors in the production of cholera infantum which deserve careful study, namely, high temperature and the food supply.

It is a matter of common observation that the mortality from diarrheal diseases in children is greatest during the summer months. The studies of the effect of heat upon these affections, which have been made by Seibert for New York, by Bajinsky for Berlin, and by Meinert for Dresden, are in striking agreement. Seibert (quoted by L. Emmet Holt, in his admirable article on "The Diarrheal Diseases of Children," in Keating's Encyclopedia) has shown that, taking the average of a large number of years, the mortality from diarrhea increases rapidly from May to July, and then steadily decreases. Thus, from 1877 to 1887, in a total of thirty-one thousand and forty-eight cases, the average mortality during May was six hundred and sixty, during June, four thousand one hundred and three, while during July it reached the enormous number of twelve thousand four hundred and sixty-eight. The mean daily temperature of these three months was respectively 54°, 61°, and about 65° Fahr. It would appear from these figures that after the atmosphere, and from it the ground and the dwelling-houses, had become heated to a certain point, say from 55° to 58° Fahr., the addition of a very few degrees produced an enormous increase in the mortality.

It is admitted that heat exerts an unfavorable influence, but just how does it act? Some have supposed that it is by heat stroke or heat exhaustion. Long-continued high temperature is exhausting to adults as well as to children. Its debilitating effects, however, are not due to the heat alone, but to derangements in digestion also. Increased heat means increased perspiration, increased thirst and increased, and often

indiscriminate, drinking. In children the results are more marked because their digestion is feeble; they are more apt to be overfed and given milk instead of water when they are thirsty (and milk is very prone to decomposition), and because they have less chance of a change in air and hygienic surroundings. The smaller number of deaths during June, notwithstanding the slight difference in temperature, is best explained by the fact that by June the heat has not continued long enough to make the houses hot continuously throughout the twenty-four hours, and the spring months have left the children, in most instances, with considerable resisting power. The fall in mortality which occurs in August and September is due in part to the fact that the deaths which have occurred by that time have diminished the number of children liable to be affected, and to the fact that we have, as a rule, cooler nights and early mornings, though the temperature at midday may be higher than during July.

When we turn to the food supply, one circumstance stands out more prominently before all the rest—it is that breast-fed infants are almost exempt. According to statistics collected by Holt, of nine hundred and forty-three fatal cases, only sixty-one, or about three per cent., had the breast exclusively. This fact is conclusive evidence that high temperature in itself is not the most important of the two causes under discussion, and indicate that the heat is harmful chiefly by bringing about certain changes in the food supply of hand-fed children. It is well known that all organic matters are prone to decomposition and putrefaction in summer time, and that cow's milk, which forms the most frequent substitute for mother's milk, is especially liable to these changes, the cause of which is bacteria. Milk is subject to so many sources of contamination from the time it is obtained from the cow to the time it reaches the child that the marvel is that it is not more frequently the cause of illness. Sterilization of the milk has accomplished much in preventing and in overcoming attacks of cholera infantum, but it has not accomplished all its warmest advocates would have us believe. For there are at all times in the intestines certain bacteria, particularly the bacterium lactis aerogenes, or acetium and the bacterium coli. Under a slight catarrh of the bowel or a dyspeptic diarrhea, which usually precedes an outbreak of cholera infantum, these bacteria multiply in number, and a large number of new forms appear. These have been described and cultures of them demonstrated by Baginsky (Transactions of the Berlin Medical Society, 1889, p. 139). When these have developed before the

milk has been sterilized, it is manifest that subsequent sterilization of the milk will not cure the disease which they have produced. Some of them are undoubtedly capable of producing disease, as experiments have proved, but no one of them has been found invariably associated with the disease. Two groups of bacteria are seen in the intestinal wall in cholera infantum; in some places bacilli occupy the glands of Lieberkühn and the interstitial tissue, and in other places the glands are filled with heaps of cocci. This being the case, cholera infantum probably is not due to the action of a particular bacterium; in other words, is not a specific disease. Holt believes that the symptoms are produced by toxic alkaloids, ptomaines, developed by the action of the bacteria on the food. Baginsky has gone further. Having discovered that the bacillus which liquefies gelatin and colors it green develops ammonia by its action on meat, he investigated the stools of cholera infantum for ammonia, and found it in considerable quantities. But the abnormal bacteria found in cholera infantum are saprophytes, that is, produced by putrid decomposition, and when Baginsky spread meat with the stools of cholera infantum, ammonia was produced in greater degree, as was to be expected from the combined results of different bacteria having a common action. Undoubtedly ammonia in the intestines would be a violent irritant, if in sufficient quantity; but we do not see that its absorption would produce a toxic effect. The experiment, therefore of killing a frog by injecting carbonate of ammonium proves nothing, especially when we recollect how much of this salt can be taken internally by children without harm. Nevertheless, Baginsky's observations are important as showing that cholera infantum is not a specific disease, but depends upon the local and systemic action of decomposition products developed by the action of bacteria upon the food. Children are more susceptible than adults for the reasons mentioned in an earlier part of this editorial, and because in them there is a relative deficiency in the secretion of hydrochloric acid, and the bile contains less bile salts. Holt appears to adopt the view that bile is not an intestinal antiseptic, but the later investigations of Kossel, referred to by Baginsky, indicate that it is.

It is impossible to overestimate the importance of a correct etiology of cholera infantum. Upon it depends the saving of thousands of lives through intelligent efforts in preventing the disease and well-directed methods of treatment. Until recent years too little attention has been given to the food supply as the most important cause. The food may cause it by being spoiled, as is the case with

adulterated and sour milk ; by being improper in kind, such as solid food for nursing children ; and also by being given in too large quantities. These three errors in diet usually co-exist. The most important things in prevention are to obtain pure milk and to sterilize it before use, to restrict the diet and to guard against overfeeding. It is better, in summer time to give children too little rather than too much.—*Medical and Surgical Reporter*.

THE HEAT AND ITS EFFECTS.—The heat of the last two weeks has been remarkable as occurring so early in the season, it being very rare, indeed, for fatal sunstrokes to occur in the first summer month. More than a score have already taken place in this city, while the news of the daily press informs us of a similar mortality in other cities and towns, while even those who live in the country are not exempt from the fatal effects of the sun.

Reports of sunstrokes are usually of the heat effects on adults, while the direct and indirect effects on the infant population are many times as great. Too often their main nutrient, milk, has become tainted or poisoned from the absorption of germs and gases, making it a dangerous article of food and productive of summer enteritis, or other trouble that leads to a fatal termination.

At this time of the year it is a good plan to have all milk sterilized as soon as possible. This is a very simple process, and consists of putting the milk in a clean bottle, loosely corking with a clean, new cork, and then placing the bottle in a vessel of water, and heating it slowly to the boiling point, this temperature being continued for forty-five minutes ; then tightly cork the bottle and set it in a cool place until needed for use.

The nutrient properties of the milk are not destroyed, or even weakened, by this process, but for most persons it is more easily digested and is more nourishing.

Babies, children, and adults, in hot weather, should live as much as possible in the shade, where there is the freest possible circulation of pure air. Long and frequent cool baths for infants are very conducive to their health and comfort. There is nothing like a long, cool bath, to relieve the discomfort of prickly or summer heat, following this with a little anointing of the creases of the skin with cold cream, vaseline, or fresh lard.

In case of looseness of the bowels, a few doses of the ordinary chalk mixture will usually furnish the desired relief. This should be given in tablespoonful doses, and after every stool. Where there is a weakening of vitality, with very great propriety and advantage, teaspoonful

doses of maltine may be added to the sterilized milk ; the diastatic power of maltine being capable of rendering soluble and digestible any starchy food that may be in the stomach. Starch foods, such as Irish potatoes and breads, have often been regarded as the immediate and irritating cause of infantile enteric disorders. In part this may be true, and yet these starch foods were the very ones the lacteals and absorbents were crying for, and needed to stay the waste that was going on with fatal rapidity.

Right here the inestimable value of maltine, with its diastatic solvent properties, is quickly made manifest in changing the character of the discharges, and causing an irritant factor to become one of nutrition ; given in sterilized milk the benefit of both is obtained.

In the city it is a good thing, in every possible case, to send the mother and infant out to the parks and suburbs for one, two, or three hours after sundown. The car ride is easy, while a shawl or other garment spread on the grass will afford a genuine relief and change from the mother's lap or cradle.

A little instruction from the family physician to his patrons in these simples may be the means of saving many valuable lives ; nor should the physician take it for granted that his clients are informed in such matters, for very intelligent people sometimes are very ignorant of the plainest hygienic rules. This is especially the case in regard to the care of very young children. We recently saw an illustration of this in a very intelligent appearing mother, who did not even know how to hold her infant in positions of comfort to the babe and ease to herself. Even in such matters as this the doctor may give wholesome advice.—*Cincinnati Lancet-Clinic*, July 5, 1890.

ON THE ACTION OF SULPHONAL.—In the *Therapeutische Monatshefte* for March, Dr. Franz, of Breslau, says : Pertinently to the researches of Dr. Knoblauch concerning the effect of sulphonal in diseases of the mind (*Therap. Monatsh.*, 1889, p. 495), I may briefly relate here my own experiments upon the operation of sulphonal in surgical diseases. I have administered sulphonal Bayer to eighty-two patients, in about two hundred and sixty doses, and from these experiments, which were made to learn what injurious collateral effects sulphonal might have, have reached very favorable conclusions. In the cases in which only an agrypnia nervosa had to be dealt with, comprising twenty-six patients and eighty-six doses, sulphonal failed me only four times, and those all with the same patient. This patient was very anemic, had pulmonary phthisis, and had been operated upon several times for tubercu-

lar abscess. The patient declared besides that he could not sleep without morphine. In all the other cases the patients slept very well after sulphonal; and the sleep was, according to their representations, beneficial and refreshing. In no case had the patients any trouble from sulphonal; they did not complain of dizziness or staggering or headache, nor did any ataxic symptoms appear. Only the single patient (a morphine-taker), already mentioned, once had, after a dose of three grams of sulphonal, somewhat marked delirium; otherwise he had no trouble. In one case we succeeded in weaning a moderate morphino-maniac from his habit by sulphonal. The maximum dose was in most cases one gram. Somewhat larger doses had to be taken by patients who were suffering pains from wounds or other causes. With them a dose of two grams was sufficient to produce in a short time healthful sleep. Only in five cases did sulphonal fail to remove violent pains, and then, indeed, in doses of only a gram. In one case the pains of a violent supra-orbital neuralgia—following a phlegmon of the left half of the face—ceased after the administration of a gram of sulphonal. With another patient, toothache disappeared after giving sulphonal. In all these cases no headache, dizziness, ataxia, or other collateral symptom appeared.

Sulphonal also agreed well with all patients when given immediately after narcosis with chloroform. The pains, headaches, and vomitings that accompany the narcosis were not increased by it. No inconveniences followed the sulphonal; the numbness and the heaviness of the head after chloroform were in no case increased, but in many cases ceased. Sleep during the night following the operation was relatively not so good as in the other cases; but only three of the patients were unable to sleep. In the other cases the sleep was light and sometimes broken, but was otherwise generally good. Several patients averred that they slept better after sulphonal than after morphine, which was given them alternately with it.

Sulphonal had a marked effect with children, to whom it was given in seventeen cases in doses of from five to eight centigrams. Sound sleep soon came on, without any unfavorable symptoms being induced.

When did the effect of sulphonal appear? I must first remark that no patient who took sulphonal between two and four o'clock in the afternoon slept during the day or till evening. In the other cases sulphonal was given between six and eight o'clock in the evening, and sleep came on in the case of patients with *agrypnia nervosa* in the course of an hour, while with those who had violent pains or were still under

the influence of chloroform it generally held off somewhat longer. In a few cases a sound and healthy sleep did not set in until toward morning. I should mention that the sulphonal in all the experiments was given in wafers, so that the difficult solubility of the sulphonal may be responsible for the delay in the patients' going to sleep.—*New York Med. Jour.*

SODIUM SALICYLATE IN THE TREATMENT OF CHOREA.—In an article in the *Bulletin Général de Thérapeutique*, No. 16, 1890, Dr. Dresch speaks very favorably of the action of salicylate of sodium in cases of chorea. The disease, he says, is of greater gravity than is generally supposed, for it not infrequently causes death either directly or indirectly. The importance, therefore, of an intelligent and active therapy is manifest. He believes that chorea is a microbial disease, the micro-organism of which is probably of the same family as that of rheumatism. The choreic movements are to be regarded as reflexes provoked by the presence in the tissues of the specific microbe, and are similar to the cough of pertussis, the spasms of tetanus, the premonitory chill of certain fevers, etc. Having these views as to the nature of the disease, he adapts his therapeutic measures to them, as far as it is possible to do so, although he admits freely the inefficiency of salicylic acid as a microbicide. The treatment should be begun at the earliest possible moment, and should be energetic, whether the beginning of the disease be severe or mild. The drug is not given as a germicide or an anti-rheumatic, but rather because of its action upon the medulla and cord, where it affects the motor centers as well as the sensory, thus restraining the movements of chorea as well as the pain of rheumatism. It is probable also that it would act equally well in diminishing the severity of the paroxysm in whooping cough, though the author has never tried it in that affection. It is to this sedative effect of the drug he attributes the fact that he has never seen any excessively severe cases since beginning its use, and has not been obliged to have recourse to any of those agents which calm the paroxysms only by stupefying the patient. But another great advantage possessed by the salicylate is that it increases the elimination of waste products, being, like benzoic acid and its derivatives, a solvent; in other words, it opens the kidneys instead of closing them as do quinine and antipyrine, which are so often given in chorea. It is evident that the choreic movements must greatly augment the amount of waste products, both muscular and nervous, thrown into the circulation, which products are toxic and of themselves excite convulsions. It is of the ut-

most importance, therefore, that any remedy given for the disease should favor the elimination of these materials by the kidneys and other emunctories. Dr. Dresch has found the salicylate well borne in most cases, a child of twelve years taking without trouble as much as sixty grains in the twenty-four hours, the only precaution being to give the drug in small and repeated doses well diluted with slightly alkaline water. It is not usually necessary to continue the use of the remedy more than eight or ten days. During the first period of the disease the patient should be kept in bed in a well-ventilated room at an even temperature, and noise should be avoided as far as possible. A milk diet is the best if it is acceptable to the patient, but beef tea is not to be recommended. An enema of tepid water once a day is useful, but should not be insisted upon if the patient objects strenuously. Nothing, indeed, should be done that is liable to excite the child. As the disease begins to subside the treatment should keep pace with it, the child being allowed to get up and gradually resume his usual diet and amuse himself in his accustomed way. The author objects decidedly to sea-baths.—*Medical Record*.

THE ETIOLOGY OF CONSUMPTION.—Dr. August Haupt of Soden, a beautiful watering-place at the foot of the Taunus Mountains, has published a pamphlet, entitled "The Importance of the Heredity of Tuberculosis in Comparison with its Propagation by Sputum." It treats of the heredity of tuberculosis, its direct inheritance, its incubation, statistics of heredity, and contagion. Dr. Haupt maintains that the inheritance of tuberculosis from parents or ancestors can not possibly be disputed, and that the theory of absolute contagion is weakly founded. He quotes from the report of the Collective Investigation Committee in respect to the Brompton Hospital, in which the danger of infection is declared to be utterly improbable. Celli, Guarneri, Aufrecht, and others, are of nearly the same opinion. Robertson found that in at least 80 of 100 married couples in which the husband or the wife was consumptive, the other party did not become so. Leudet observed that out of 112 widows and widowers of persons who died of consumption after illness varying from one to twenty years in duration, 105 remained perfectly healthy. During the fourteen years of Dettweiler's work as physician in the Consumption Hospital at Falkenstein, there has not been a single case of infection among the attendants, some of whom were for seven years in constant contact with patients who were dangerously ill. The author quotes the following words of Professor Leyden:

"Immediately after the discovery of the tubercle bacillus there was a tendency to attach much more importance to contagion than before, but further observation has shown that it does not play so very great a part, and that the majority of cases are due to heredity." Of 680 Italian physicians 59 declared for contagion, 124 against it, and 497 mainly for heredity. In England 792 out of 1,078 declared against contagion. Dr. Haupt reports his own experience at Soden thus: Among the 1,500 inhabitants of the place there are 101 who let lodgings. In most of the houses the wives, with sisters or daughters, serve and tend the tuberculous patients who come for treatment. In many houses servant girls from the neighboring villages, hired for the summer, help, making the patients' beds, cleaning their rooms, beating the carpets, removing the sputum—these occupations, so closely connected with the danger of infection, are, among others, the tasks of these persons; and it must be added that they prefer the severest cases, because, as more help is required, the remuneration is higher. In winter the members of the landlords' families occupy the rooms in which generally the most severely affected patients have lain—the rooms on the ground floor. Between 1855 and 1888, 48 of the 238 members of such families died, 10 of them of tuberculosis. In 6 of these 10 cases heredity was demonstrable, and the remaining 4 were due to colds and external causes. Of the 415 servant girls 17 died, 5 of them of tuberculosis, also demonstrably due to other causes than infection. Within thirty years, then, among 653 persons, most of whom were for several summers with and in attendance on the patients, there were 15 deaths from tuberculosis, not caused by infection. The same proportion prevails among other persons in close contact with consumptive patients, attendants, washer-women, etc. As to the general mortality of Soden, the pamphlet contains the following data: Seventy-six persons died during the last three years, 10 aged from eighty to eighty-five, 11 from seventy to eighty, 9 from sixty to seventy. Of these 76 deaths, 7 were due to tuberculosis, including two cases of tuberculous meningitis in children and one of tuberculosis of the bones, also in a child. Of the four other cases, only one was that of a person who came in contact with patients, and this was a case of alcoholism, ending in phthisis.—*London Lancet*.

OPEN-AIR TREATMENT OF TUBERCULOSIS.—The ever-recurring subject of the treatment of this intractable malady, whose victims in all countries may be put down as legion, was again brought before the French Academy of Medi-

cine at a recent sitting by Dr. Daremberg. He advocates what may be called the open-air treatment, and declares that of the number of phthisical people who followed out this method the great majority derived marked benefit. First of all, the fever was found to diminish, which indicated an arrest of the threatened general infection of the body, and a lessened activity in the parts already invaded. As a consequence better nights were passed, the appetite improved, the respiratory movements became more ample, and the cough much less frequent. At the same time that this treatment by abundance of fresh air is being prescribed, it is necessary to forbid all fatigue, even short walks, should the temperature be over 38° C. There is nothing, however, in the method which contra-indicates the use of therapeutic agents and the usual methods of treatment in ordinary use when judged desirable. Patients are found to support the treatment best when lying down in bed rather than when up and sitting, and in this way the treatment may be begun by at first opening the bedroom window in the morning as soon as the temperature of the air reaches 8° C. After a time it will be found that the night air can, with certain preliminary precautions, be supported and respired with advantage. When gradually habituated to this state of things, it was found that the sufferers bore well the atmospheric disturbances which usually cause so much distress to phthisical people who live a sheltered existence. The attacks of hemoptysis and congestion so frequently observed under these latter conditions are much more rare. It must not be overlooked, however, that the almost absolute rest, or at least any thing approaching the smallest overexertion or fatigue, plays an important part in the results obtained, for without doubt exertion and fatigue are, next to the actual tubercle, the greatest enemies of the phthisical. In short, Dr. Daremberg concluded that rest in the open air constituted the most rational method whereby the patient could husband his strength and resources. The results were remarkable even in those suffering from high fever, and undergoing hectic emaciation, and in his opinion the method ought to become the adjuvant of all therapeutical treatment. At the same sitting M. Dujardin-Beaumetz condemned as useless the hot-air method advocated by Weigert.—*Ibid.*

HEREDITARY CHOREA IN ADULTS.—Dr. Bernatski reports in a Polish medical journal a case occurring in the Warsaw University Clinic, of the so-called "Huntington's chorea," or chronic hereditary St. Vitus' dance in adults. According to the accounts of it given in medical lit-

erature, it is an extremely rare affection, appearing in adults and being complicated with mental disturbance. It is hereditary, whole families being affected by it. Irregular inco-ordinate movements appear first in the facial muscles, and afterward spread to those of the upper extremities and of the trunk. These movements become arrested or diminished during voluntary movements, this constituting, according to Landois, a pathognomonic symptom distinguishing the affection from St. Vitus' dance as described by Sydenham. The majority of authors who mention the disease describe it as incurable. Dr. Bernatski's patient was a man of forty-eight years of age, a shoemaker by trade, who when admitted had been suffering from choreic movements for five years. His mother and his maternal grandfather had been similarly affected. The movements occurred in the head, face, the upper extremities, and in the trunk. At first bromide of potassium was prescribed to the amount of sixty-two grains per diem. This, however, was quite useless, the movements continuing as before. *Liquor arsenicalis*, that is, of course, the Russian one, which is stronger than that in the British Pharmacopeia, in the ratio of 6 to 5—was then ordered. Six drops per diem were given at first, being gradually increased until ten drops daily were taken. After four days of this treatment there was some perceptible improvement, and by the eleventh or twelfth day the involuntary movements had very nearly ceased, the fingers only showing signs of them. It would, therefore, appear that arsenic is indicated in this disease, and affords some hope of cure. The patient referred to left the hospital and was not seen again.—*Ibid.*

SOME PROPERTIES OF SODIUM SILICO-FLUORIDE.—It is about two years since sodium silico-fluoride was introduced as an antiseptic agent, during which time it has been more or less extensively used, and yet there is little new evidence forthcoming in regard to its chemical properties and physiological action.

Some months ago I was engaged in making a series of sterile pancreatic digestions, and after employing many of the current germicides, I determined to employ a sample of "salufer." Upon doing so it was surprising to find that at the end of a few days the digestions were, some of them, absolutely putrid.

The digestions were made in two ways—either a two-per-cent solution of sodium bicarbonate was taken and the silico-fluoride subsequently added to saturation; or a known volume of the saturated solution of sodium silico-fluoride was taken and sufficient sodium carbonate added as would produce a two-per-cent solution.

In the first case the digestion remained aseptic; in the second there was effervescence as the sodium carbonate was added, and the digestion became offensive at the end of a few days. In the first case the total fluorine was much greater, I believe, than in the second, existing probably in part as fluoride of sodium, and in part as unaltered silico-fluoride. In the second case the silico-fluoride became converted, on the addition of the sodium bicarbonate, into the silicate and fluoride of sodium, and so little silico-fluoride remained that it was not sufficient in amount to act as a germicide.

It was suggested by Thomson, who discovered the antiseptic action of the fluorides, that surgeons who placed their knives in solutions of sodium silico-fluoride should add a little carbonate of soda in order to prevent corrosion of the steel. Such a procedure appears, in the light of the above facts, to be more than questionable.

With regard to the mode in which the salt acts as an antiseptic, the following facts may prove of interest:

In order to preserve a five-per-cent solution of serum albumen in saline solution, an unmeasured quantity of silico-fluoride was added. After a few days the solution was clearer and free from a hazy turbidity previously noticed, but no trace of proteid was detected in the supernatant liquid. This effect I have never been able to reproduce in the same degree, although a saturated solution of the salt slowly and partially precipitates serum albumen, egg albumen, and paraglobulin from their solutions. In fact, a saturated solution proves an exceedingly delicate test for these proteids. With a saturated solution of the salt, albumen was detected in a sample of urine containing casts, which only gave a reaction with trichloro-acetic acid on mixing, and with picric acid by the contact method, and which gave none on boiling with the addition of a drop of acetic acid, nor with an equal volume of picric acid, nor with acid brine, nor with the cold nitric-acid test. The worst objection to its use as a test is that it must be used by the contact method, and that the drug varies a good deal in composition. Some specimens were acid, others neutral, and the majority alkaline.

While the saturated aqueous solution precipitates some proteids, there is yet another effect of the solid salt akin to that of certain other inert powders. M. Boymond pointed out that the filtration of a solution of serum albumen through bismuth trisnitrate sufficed to remove the proteid from its solution, and I find that upon leaving a solution of serum albumen in contact with an underlying layer of fine sulphur, a jelly-like layer of proteid separates out

and can be seen lying upon the sulphur, while the supernatant fluid is clear. Sodium silico-fluoride appears to act in this twofold manner, and one or both of these properties appear to me to offer a possible explanation of its antiseptic action, especially as similar precipitants of proteid—as alcohol, mercuric chloride, picric acid, etc.—are generally antiseptics.

With regard to its internal administration, I can corroborate the results of those who describe it as not so innocuous as it has been represented. A single dose of two grains produced in one case discomfort and nausea. A quarter of a grain thrice daily, exhibited for some weeks, produced, however, no ill effects.

It appears to me not unlikely that it may be decomposed within the body in the same way that it is by sodium carbonate, glass, etc., and that after absorption it is as useless as an "internal germicide" in infective disorders as it is in certain cases in the laboratory.—*Dr. E. Lloyd Jones, British Medical Journal.*

POISONING BY ANTIFEBRIN.—*Dr. J. Vierhuff*, of Subbath, in Courland, communicates to the *St. Petersburger Medicinische Wochenschrift* the notes of a case of antifebrin poisoning, which are quoted in the *Lancet*, May 24, 1890, and which show what dangers people run who dose themselves with drugs of this class. A healthy young married woman, who had been in the habit of taking antifebrin for headache, feeling the pain come on early one morning last summer took, fasting, about a teaspoonful of the drug in some water. In about ten minutes, the headache not being relieved, she repeated the dose, which her husband remarked might prove dangerous. She consequently took a glass of milk and some alum-water in order to produce vomiting, which she succeeded in doing, but immediately afterward giddiness, singing in the ears, throbbing in the temples, and a dull pain in the head, together with a feeling of weakness, came on, and the face assumed a livid hue. When seen four hours after the drug had been taken the face was a livid color, the lips blue, the pupils contracted, but the heart, temperature, and mental condition were normal. An aperient and a stimulant were ordered. Shortly afterward the patient became suddenly collapsed, the pulse could not be counted and the breathing was very shallow; in fact, the woman appeared to be dying. The soles of the feet were brushed, vinegar was rubbed on the face, and cold water sprinkled over the face and chest; also a mixture of camphorated oil and ether was ordered for injecting subcutaneously. While this was being procured several syringe-fuls of dilute spirit, which was all that could be obtained, were injected and the patient was

brought round, though for three hours and a half her condition appeared hopeless. Then, after recovering somewhat, collapse again came on, and recourse was had to an intravenous injection of a solution of common salt, which appeared to act most beneficially. In about fourteen hours after the drug had been taken the patient was out of danger. After that she continued to improve, though she complained of debility and pain in the limbs for a week. Dr. Vierhuff remarks that the serious symptoms were probably due largely to the patient's taking the anti-febrin on an empty stomach.—*Med. and Surg. Reporter.*

THE EFFECTS OF DIURETICS.—Several St. Petersburg degree theses this year deal with the subject of diuretics and their effects. Dr. Alexéeff finds that digitalis increases the excretion of water by the kidneys, but lessens that by the skin, the ratio of the total quantity excreted to that absorbed not being increased, and the effect of nitrate of potash being much the same. Both these substances, too, raise the blood pressure. Dr. Atlasoff, who has examined the effects of diuretics on the metamorphosis of potash, soda, lime, and magnesia, finds that both digitalis and nitrate of potash increase the metamorphosis of soda in the body and its excretion by the kidneys, its absorption being promoted by digitalis and sometimes by nitrate of potash. Digitalis increases both the absorption and metamorphosis of potash, but nitrate of potash, though it slightly increases the absorption, diminishes the metamorphosis. Digitalis and nitrate of potash somewhat diminish the absorption of lime, the former increasing and the latter decreasing the metamorphosis. The excretion of magnesia by the kidneys and its metamorphosis are somewhat lessened by digitalis, but are generally increased by nitrate of potash, its absorption being promoted by nitrate of potash and usually retarded by digitalis. Dr. Bêlkoff finds that the metamorphosis of chlorides, phosphates, and sulphates is promoted both by digitalis and by nitrate of potash, the former drug exerting its effects for some time after the day of its administration, but the latter having more transient influence. Dr. Serezhnikoff finds that digitalis, when it has any effect on the nitrogenous metamorphosis, tends to increase it. It always, however, improves it qualitatively—that is, increases the metabolism.—*London Lancet.*

MENTHOL IN THE HYPEREMESIS OF PREGNANCY.—Hyperemesis in pregnancy is a grave complication. Within the last ten years Professor Horwitz, of St. Petersburg, and Dr. Graily Hewitt have written upon the subject.

Dr. Copeman first published in the *Journal* of May 29, 1875, the famous case which he treated after the method to which his name has since been applied. "Copeman's treatment" signifies the relief of sickness by dilatation of the os and cervix uteri. The obstetrician's fingers are usually sufficient for the purpose. The treatment has been widely adopted. Between 1875 and 1880 several experienced obstetricians contributed papers to our columns on successful cases, and for full information we refer the reader to the statistical tables published by Dr. Hewitt in the *Transactions* of the Obstetrical Society for 1884. Of course Copeman's treatment does not suit every case. Dr. Gottschalk recently described a case in the *Berliner klin. Wochenschrift*, where, in a woman, aged twenty-six, who had been pregnant three times, uncontrollable vomiting set in during the second month of her fourth pregnancy. Neither cocaine nor Copeman's treatment availed, and the sickness continued until abortion was induced. The patient became pregnant for the fifth time, and the vomiting returned, hematemesis taking place. A draught consisting of menthol one part, rectified spirits twenty parts, and distilled water one hundred and fifty parts, was prescribed by Dr. Gottschalk, and a tablespoonful given every hour. The vomiting ceased after the third dose, and pregnancy proceeded to term without any further complication. A second case was successfully treated with menthol.—*British Medical Journal.*

THE DIFFUSIBILITY OF PHTHISIS.—On this subject a paper was recently read by Dr. Rossoni before the *Accademia Medica di Roma*, and in the discussion which followed, a strong opinion was expressed on the dangers incurred in schools, colleges, families, and hospitals by the aggregation of individuals, one or more of whom may be suffering from phthisis pulmonalis. Justifying the popular belief that the malady is communicable—a belief of long standing in Italy—Dr. Rossoni reviewed the labors of German pathologists on the subject, and insisted on their conclusions as being demonstrated—namely, that the sputum of the phthisical, too often recklessly discharged without the use of pocket-handkerchiefs, and allowed to remain where it is expectorated, becomes in its desiccated condition a fertile source of propagating the disease. Admitting that this unlovely practice is discreditable common in his own country, as in Germany, and, indeed, on the Continent generally, he closed his paper by suggesting that government should be memorialized to appoint a commission of inquiry into the best means of checking this mode of

diffusing phthisis. Dr. Baccelli, who presided, agreed with Dr. Rossoni as to the necessity of obviating the spread of the disease by regulations against reckless expectoration, but saw no practical remedy till the public were better educated so as to see the dangers incurred by their thoughtlessness. Meanwhile, wherever it was possible, as in the gregarious life of schools and collegiate establishments, a beginning in the right direction might be made, until the habits of their young inmates were so far improved as gradually to teach the community at large a lesson which the superior civilization of other countries had rendered unnecessary.—*London Lancet*.

THE GERMICIDAL PROPERTIES OF URINE.—

Dr. Lehman, of Würzburg, remarking that urine rarely contains pathogenic bacilli, although they usually abound in the kidneys in infective diseases, determined to inquire whether the absence of bacteria in the urine is due to the filtering process to which it is subjected in the kidneys, or to some inherent germicidal property. The nature of the constituents of urine—viz., acid phosphates, carbonates, and aromatic bodies—would seem to render the theory of bactericidal action not improbable. His experiments were conducted in the following way, and are quoted in the *Lancet*, May 24, 1890: Fifty cubic centimeters of fresh urine were added to one cubic centimeter of a twenty-four hours' old broth culture of anthrax, cholera and typhoid bacilli, and, after being well shaken up, one cubic centimeter of the mixture was employed to fertilize an agar plate culture. This was kept in an incubation apparatus. In all cases the number of colonies was found to have diminished, the greatest diminution occurring when the initial number of colonies was comparatively small. The germicidal property of the urine appears to be interfered with, if not destroyed, by neutralization with potash and also by sterilization. From some observations made by Dr. Richter it would seem that fresh albumen has a powerful action on the bacilli of anthrax and typhoid, but that the yolk of egg, on the other hand, forms a particularly suitable culture medium for them.—*Med. and Surg. Rep.*

THE INFLUENCE OF MENSTRUATION ON LACTATION.—

The question whether a menstruating mother should continue to nurse her child has been answered differently by many writers; some say it alters the quantity of milk, others the quality, and still others both quantity and quality. N. Davis, Vernois, Becquerel, and Emil Pfeiffer alone have considered this matter scientifically. Schlichter (*Wien. Klin. Wochenschr.*, ii, 51, 52, 1889; iii, 4-5, 1890)

has attempted to add some needed observations in this direction. The analysis of the milk, which consisted of the determination of the fat, casein, total albumen and total solids, gave in the milk of nine mothers no difference in the quality when menstruating; indeed the differences were less than normally occurred at different periods of the same day.

The children of fifty nursing mothers, who menstruated within two and one half months of their confinement, were examined as to their weight and general condition, and no material change was found during, or just after the period of menstruation. The author sets forth the results of his observations as follows: That after the sixth week menstruation does no harm to mother or child; before the sixth week hemorrhage or menstruation retards the birth of the child. An outbreak of colic, dyspepsia, or enteritis during menstruation, is to be regarded as a mere coincidence, and should not be treated by changing the nurse, but by the usual methods.

RESECTION OF THE STOMACH.—

Before the Medical Society of Hamburg, January 28, 1890, Schede presented a woman, fifty-one years of age, in whom, for carcinoma, he resected three fourths of the stomach. Since the previous summer there had been emaciation. In September a movable tumor, about the size of a kidney, was observed in the abdomen, below the umbilicus, without other symptoms. An incision, December 23d, disclosed a carcinoma of the stomach, involving almost the entire organ, but one fourth being free. The extirpation was easy, as the duodenum was supplied with a long mesentary and the glands were not infiltrated. It was thus possible to make the incision through the gastro-colic omentum close to the greater curvature. The patient made a good recovery from the operation and increased rapidly in weight. Microscopic examination disclosed the epithelium from the region of the incision near the tumor in a state of active proliferation and nuclear division. To prevent stretching of the cicatrix, Schede unites the peritoneum and the deep fascia with fine, buried silver sutures. Deep silver sutures are also applied, and finally continuous catgut sutures. Union occurs without reaction.

MALIGNANT ENDOCARDITIS IN A CHLOROTIC SUBJECT.—

At a recent meeting of the Paris Clinical Society, Dr. Girode related a case of malignant endocarditis occurring in a young woman the subject of chlorosis (*La France Med.*, No. 22). There was no rheumatic history, and indeed, beyond some functional

nervous affections, nothing occurred in the case to give rise to anxiety, until, four days before she was admitted to the Beaujon Hospital, she was attacked with embolic hemiplegia and hemianesthesia; the right radial artery also became blocked. Death, which was preceded by rise of temperature, occurred about three weeks after the attack. Extensive cerebral softening of the right hemisphere due to embolism existed. There was vegetative endocarditis of the aortic and mitral valves, foci of suppuration in the myocardium, and patches of endarteritis in the aorta. The source of the malignant endocarditis was obscure; there was no gastric ulcer, uterine or cutaneous affection, which might have given entrance to micro-organisms. Dr. Girode attributed much to the fact that the patient, while of weak general health, had for three weeks before her illness come to Paris to take a situation in domestic service, and he thinks this change to comparatively unhealthy surroundings had been very detrimental.—*London Lancet*.

CAUSTIC PASTE FOR THE REMOVAL OF EPITHELIOMA.—At a recent meeting of the New York Dermatological Society (Journal of Cutaneous and Genito-Urinary Diseases, February, 1890) Dr. Lewis presented a case which he had satisfactorily treated by means of the following elaborate paste, which was first described by Dr. Bougard, of Brussels:

Wheat flour.....	60	parts.
Starch	60	"
Arsenic	1	"
Cinnabar.....	5	"
Ammonium chloride.....	5	"
Mercuric chloride.....	0.5	"
Saturated sol. of zinc chlor....	245	"

The first six ingredients are separately ground to a fine powder and mixed in a mortar. The zinc chloride solution is then slowly added, while the contents are rapidly stirred. The soft mass is then poured into an earthen pot, and, if covered, will keep for months.

In the case reported the outer horny covering of the epithelioma was first removed with liquor potassæ; the paste was then applied and allowed to remain for thirty hours, after which poultices were applied for three days. At the end of that time the slough came away, leaving a healthy granulating surface.

LOCAL ANESTHESIA.—Dr. A. Dobisch, of Zwittau, has used, for the purpose of producing local anesthesia, a spray, with Dr. Richardson's ether spray apparatus, composed of ten parts of chloroform, fifteen parts of sulphuric ether, and one part of menthol. After one minute's

application of this spray, complete anesthesia of the skin and neighboring tissues was obtained, which lasted for from two to six minutes, and sufficed for the performance of such minor operations as opening abscesses of the cervical glands, incising a deeply seated whitlow, and the excision of an epithelioma of the nose. In all the cases in which he employed the spray above mentioned the wounds healed quite satisfactorily.—*London Lancet*.

THE DEGENERATION CAUSED BY PHOSPHORUS POISONING.—Dr. Nathanson, in a Berlin graduation thesis, discusses the effect of phosphorus poisoning on the liver. He follows Virchow in drawing a sharp distinction between the infiltration of the liver cells by fat globules and their metamorphosis into fat. He treated hardened sections with ether, and found that when these were from a healthy subject no change was produced thereby; when they were from a liver affected with fatty infiltration, the fat globules were dissolved, the remaining cell structure remaining pretty much as it had been before. When, however, the sections were taken from bodies which had died of phosphorus poisoning, the structure was entirely obliterated by the ether, and the same occurred in the case of sections of the kidneys from the same subjects. The inference is that poisoning by phosphorus produces a true fatty metamorphosis of the tissues of the liver and kidney. *Ibid*.

HEMATEMESIS IN A NEW-BORN INFANT.—Mr. H. C. Hodges, of Watton, has published the notes of a case, under the care of his father, of hematemesis in a new-born child. The child, after a perfectly natural and easy labor, was born at 5 A. M. At 11 A. M. a very urgent message came that the child had hemorrhage. It was found to be blanched and the pulse very feeble, and the clothes were saturated with bright blood which had been vomited. Absolute quiet was enjoined, and ten minims of hazeline every two hours were ordered. There was no more hemorrhage, but about a tablespoonful of blood-stained mucus was vomited at 5:30 P. M. Hiccough had been constant since the morning. There was also one rather copious evacuation of blood, besides meconium. The next day the hiccough was less. There was a slight serous discharge from the left ear, and subconjunctival hemorrhage of the left eye. On the second day after birth there was internal strabismus of the left eye. After the third day the symptoms rapidly disappeared and the child got quite well. Mr. Hodges was disposed to think that there had been some injury to the vessels at the base of the skull.—*Ibid*.

The American Practitioner and News

"NEC TENUI PENNÂ."

Vol. X. SATURDAY, AUGUST 2, 1890. No. 3.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the EDITORS OF THE AMERICAN PRACTITIONER AND NEWS, Louisville, Ky.

Subscriptions and advertisements received, specimen copies and bound volumes for sale by the undersigned, to whom remittances may be sent by postal money order, bank check, or registered letter. Address

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THE NEW HYPNOTIC.

A hypnotic that will demonstrate the fitness of the name without doing immediate or remote injury to the economy is a therapeutic desideratum second only in importance to an analgesic of analogous good qualities. The inestimable value of such medicines, could they be found, leads the therapist to continue his dream, while it gives constant stimulus to the enterprising chemist who allows scarcely a month to go by without record of a supposed discovery to the point among the synthetic possibilities of his laboratory. In spite of the claim put forward for the coal-tar derivatives, it must be admitted that the ideal analgesic is yet to be evolved from the alembic of the future; but it can not be denied that chemistry has recently given us some hypnotics against which few adverse counts can be made, while the ideal drug of this class is possibly not far to seek.

The latest arrival under this list is called *Somnal*. It was stumbled upon by Radlauer, a chemist of Berlin, who mixed chloral, alcohol, and urethan, and waited to see what would happen. The result proved to be a new compound having the formula, $C_7H_{12}Cl_3O_3N$. It is a clear fluid, readily miscible with syrups, elixirs, and fruit juices, which fact makes it eligible of administration.

It is claimed that the drug acts in a half hour or less time; that it has very little influence over the action of the heart, and that it produces a light, natural sleep lasting from seven to ten hours.

The dose is a half dram in syrup of raspberry, elixir of licorice, or some other fit vehicle. This is the initial dose advised by the discoverer, but doses of a dram have been given without sign of toxic effect.

The physicians who have put somnal to extensive therapeutic tests, are Dr. Kyn, the eminent specialist of Strasburg, and Professor Langenbuch, of the Lazarus Hospital, of Berlin. These men are loud in their praises of the drug. Time only and careful use can settle the question of its worth.

Let the physician who is always on the lookout for something new remember that, as a rule, drugs which are potent for good are also potent for harm, and at least resolve not to recommend it as a domestic remedy till its virtues have been more fully tested.

A score of years ago hydrate of chloral was vaunted as a safe hypnotic, and everybody proceeded to use it. Its evil doings would fill a volume. Much eloquence has been expended upon the virtues of paraldehyde and sulphonal. Their potency for evil, even unto death, is now a matter of fact. Urethan is too mildly uncertain to be trusted, and chloral-amide has been with us only long enough to show that it is of limited applicability, while its safety in all conditions of the system is yet to be proved. The ideal hypnotic is still undiscovered, unless we have it in somnal. We shall see.

Notes and Queries.

THE JAPANESE MEDICAL CONGRESS.—In the early part of April of this year the first national assembly of Japanese physicians was held in Tokio. The attendance was estimated at three hundred, all of them being Japanese, the foreign physicians resident in Tokio for some reason taking no part in the Congress. The sessions lasted an entire week, and very many papers were read, but none of them, if we may judge from the titles alone, offered any

thing of special interest to Western medical men, as giving them any information concerning the diseases peculiar to Japan or the special conditions affecting health in that country. In commenting upon this lack of distinctly national papers, a writer in the *Sei-I-Kwai Medical Journal* says that it shows a want of appreciation of the fact that Western medicine must be not adopted simply, but adapted to the conditions present in the East. The natural history of a people and their constitutional peculiarities should be taken into consideration when it is a question of treating the diseases which affect them. The basis of scientific medicine is the same for all lands and all peoples, but the superstructure must differ with varying conditions of constitution, climate, etc. In all new countries (new in relation to European civilization) the fundamentals of medical science must be taught by foreigners; but when the natives are themselves proficient in these, the further development of the science in their own country must be left to them. They know their people and they know the general principles of the healing art, and it is for them to apply their knowledge in these respects in such a way as to obtain the best results. The foreign physician has then fulfilled his mission, and can safely turn over the further development of his art to his native pupils.—*Medical Record*.

DEATH FROM TIGHT LACING.—Happily the practice of tight lacing, though still a fruitful source of illness, does not now occupy a foremost place among the recognized causes of death. The fact that it does occasionally stand in this position, however, should be noted by those foolish persons whose false taste and vanity have made them the suffering devotees of a custom so injurious. It should be remembered also, that whatever may be said of the more evident effects, the indirect consequences of thus tightly girding the body can not be exactly estimated. They can not be but hurtful. The veriest novice in anatomy understands how by this process almost every important organ is subjected to cramping pressure, its functions interfered with, and its relations to other structures so altered as to render it, even

if it were itself competent, a positive source of danger to them. Chief among the disorders thus induced are those which concern the circulation, and it is to the laboring incapacity of a heart thus imprisoned and impeded, both as regards the outflow and return of blood, that we must attribute such disastrous consequences as occurred a few days ago in a Berlin theater. One of the actresses, who had taken part in an evening performance, and then seemed to be perfectly well, was found next morning dead in bed. Subsequent examination of the body showed that death was due to syncope, and this was attributed to tight lacing, which the deceased had practiced in an extreme degree. As regards the persons immediately affected, the warning conveyed by this incident is obvious.—*London Lancet*.

BISMARCK'S BEVERAGES.—The London Truth says: All the deplorables and despicable of Germany have been engaged during the last few weeks in the congenial task of kicking the dead lion; but we do not suppose that Prince Bismarck troubles himself about the malevolent inventions of such contemptible vermin. The idea of Prince Bismarck having impaired his faculties by morphia-drinking is really too extravagantly preposterous a fiction for even lunatics to credit, and the even more offensive allegation of "alcoholism" is not less nonsensical. Prince Bismarck formerly took his fair share of wine or beer, but he is a man of iron head, and certainly never was affected in any way by his potations. The days, however, when he drank champagne, beer, and Rhine wines have passed away. A few years ago Prince Bismarck found his neuralgia benefited by a daily bottle of strong dry port, the wine being of a special quality which he obtained direct from Oporto; but this was also discontinued when he consulted his doctor, and for a long time past his customary beverage has been weak whisky and Apollinaris, and even of this only a comparatively small quantity has been allowed.

HOW DIPHTHERIA IS SPREAD BY CORPSES.—Dr. Baker, of the State Board of Health, says that, "March, 1890, two corpses, woman and

child of the same family, dead of throat disease, certified by attending physician to be not 'dangerous to public health,' were conveyed from Montmorenci County to Lapeer County, Michigan, where, just one week from the day the coffins were opened and the remains viewed, a person who was thus exposed came down with diphtheria. Many others would probably have been exposed except for the action of the local health officer, Dr. C. A. Wisner, who, suspecting that the cause of the deaths was diphtheria, warned the neighbors and forbade the opening of the coffins at the funeral. He promptly isolated the first case that occurred, and no epidemic resulted. This is quite different from the result of a similar occurrence at Zanesville, Ohio, last spring, where many deaths resulted from exposure to a corpse brought from Chicago. It shows the importance of notice to the local health officer of the arrival of every corpse, so that he may take every precaution which may be necessary."

CHOLERA IN ASIATIC TURKEY.—Rapidly following on the announcement that cholera had ceased in Mesopotamia comes intelligence from Diarbekir, to the effect that cholera has broken out in the village of Heden in the neighborhood of Jesireh. The latter town lies high up in the course of the Tigris in the province of but below the town of Diarbekir, and it is one of the furthest points to the northwest that has been admitted to have suffered from cholera since the commencement of the epidemic during the course of last year. As is usually the case, we hear of a military cordon having been placed around the infected district, and if the ordinary sequence of events takes place, we shall next hear of an extension of the mischief beyond the proscribed area. In the mean time activity is being displayed in Russia to stay any progress of the disease across the southeastern frontier. A proposition to establish a quarantine line along the Trans-Caucasian Railway has, however, met with strong objection, and we are glad to learn that it is now openly contended in Russia that such a measure could not be depended on for staying the advance of the epidemic. Sanitation, on the other hand, is held forth as the proper remedy. This view

accords with the resolution of the Technical Committee of the Rome Conference, which received the support of the Russian delegate, to the effect that laud quarantines are useless.—*London Lancet.*

THE ACTION OF CAFFEINE.—How caffeine should have such an exhilarating effect upon the organism, and yet comply with its acknowledged physiological action of preventing tissue metamorphosis, has frequently puzzled those who have thought upon the subject. The recent researches of Dr. E. T. Reichart, indicate the speedy prevalence of new opinions on the matter of caffeine. The results of Dr. Reichart's experiments show that caffeine increases heat production and heat dissipation, and therefore promotes destructive tissue metamorphosis. He deems the virtues of tea and coffee to depend entirely upon the exhilarating effect each has upon the mental functions and its excitation of the higher nervous tissues. It does not replace food or increase the power for work without corresponding tissue destruction.—*Physician and Surgeon.*

THE Health Department of New York, on June 30th, appointed the fifty physicians of the "summer corps," and on Wednesday, July 2d, they began their work among the poor of the tenements. Of the value of this work, which will continue during July and August, the following figures from last year will convey some idea. There were 264,000 families visited, 16,148 sick people prescribed for, 12,000 tickets for free excursions distributed, and 50,000 circulars containing simple instructions for the care of children given away during the hot months. This work was chiefly among those unable, through poverty, to secure the medical treatment and medicine which the Board of Health furnished free.—*Med. and Surg. Rep.*

WHEN JUDGES DIFFER.—It has often been pointed out that though the phrase "doctors differ" is so commonly quoted as a reproach to the medical profession, it is one which, both in its origin and its true application, refers at least as much, if not more, to experts in the law, engineering, and in other so-called exact sciences.

The Lord Chancellor (Lord Halsbury), speaking at the Mansion House not long ago, went so far as to make it a particular merit of the judges, and one of their claims to the public esteem which they so justly enjoy, "that they spent nearly half their time in differing from their learned brethren."—*British Med. Journal*.

It was reported from Madrid, Spain, under date of July 1st, that during the two weeks before that date, there had been 144 cases of cholera and 36 deaths from the disease in Gandia. The medical authorities were of the opinion that the disease would not spread further. The latest cases were of a more benignant type. On July 6th, it was reported that the cholera epidemic in Valencia, Spain, had slightly increased. Eleven new cases and three deaths were reported at Rolova, and three new cases and three deaths at Gandia on July 6th.

ANNOUNCEMENT.—Beginning with the issue for March, 1890, the *Annals of Gynecology*, formerly published in Boston, was enlarged and improved, and a department of Pediatrics added, under the editor-ship of Dr. Louis Starr, of Philadelphia, formerly Professor of Diseases of Children at the University of Pennsylvania, author of "Hygiene of the Nursery," associate editor of "Pepper's System of Medicine," Physician to the Children's Hospital, and author of "Diseases of the Digestive Organs."

The journal is now published by University of Pennsylvania Press, Philadelphia, under the name, *Annals of Gynecology and Pediatrics*.

ABSINTHE.—The following are stated to be among the acquired or inherited effects of surrendering to the seductive *l'heure de l'absinthe*: Steatosis of all the glands, atheromatous patches in the arteries, pachymeningitis, atrophy of testicles and ovaries, facial asymmetry, prognathism, arrested development of the extremities, club-foot, lesions of the genito-urinary organs, precocious sterility, and various mental and moral defects.

THE ALVARENGA PRIZE of the College of Physicians of Philadelphia, consisting of one

year's income of the bequest of the late Senor Alvarenga, of Lisbon, has been awarded to Dr. R. W. Philip, of the Victoria Dispensary for Consumption and Diseases of the Chest, Edinburgh, for his essay on pulmonary tuberculosis, which will soon be published by the college.

CENTRAL WISCONSIN MEDICAL SOCIETY.—At the annual meeting of this society, held in Madison on June 24th, the following officers were elected: President, Dr. Julius Noer; First Vice-President, Dr. C. R. Green; Second Vice-President, Dr. J. A. Mack; Secretary and Treasurer, Dr. C. S. Sheldon; Censors, Drs. H. B. Favill, C. A. Gill, and Dr. Bancroft.

A NEW medical society has recently been formed in France with the title of "La Société Clinique des Praticiens de France." It is to meet twice a month, and will hold the now inevitable "congress" from time to time, together with an annual dinner. Besides this the Society will publish two journals, the *Annales de la Société Clinique* and the *Clinique Française*.

A READING ROOM AT BERLIN.—A reading room is to be established in connection with the Tenth International Congress for the benefit of its members. The current medical literature will thus be at command, and medical men from every section of the world can there review their home journals.

"ORISTRY."—According to the Boston Medical and Surgical Journal, Dr. J. L. Williams, of Boston, proposes the adoption of this term to signify the rapidly widening specialty of the dental and oral surgeon. The word is compounded of the initial part of *oral* and the terminal part of *dentistry*.

THE Bishop of Peterborough has introduced a bill in the House of Lords regulating children's life insurance. Under five years, but four pounds can be taken; over five to fourteen in boys and sixteen in girls, eight pounds are allowed. The money can only be paid to the undertaker.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., AUGUST 16, 1890

No. 4.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

FORCIBLE DILATATION IN TREATMENT OF CORPOREAL AND CERVICAL ENDOMETRITIS.*

BY L. C. ROYSTER, M. D.

CASE 1. Mrs. A., aged twenty-three, American born, white, married five years, sterile, had typhoid fever in October last. There was retarded convalescence. Palpation over womb elicited marked tenderness. Inquiry into past history elicited the fact that she had always had trouble at the menstrual period, and was almost constantly troubled with whites. Being exceedingly timid, she at first refused an examination, but submitted after a time. The finger found the womb in normal position, slightly enlarged and tender. The speculum revealed an intense vaginitis, with inflammation of the external os and neck. A sound was with difficulty introduced into the body, there being a constriction at the "os internum." There was also here extreme tenderness. The body of the womb measured in depth three and a fourth inches. Upon further inquiry the patient stated that something like an abscess would at times break loose, when a considerable quantity of pus and blood would come away. This always occurred between menstrual periods, usually soon after menstruation had ceased. In the absence of any history or other evidence of cellulitis, I concluded that this flow must be from the body of the womb.

Diagnosis: Chronic corporeal endometritis, with consequent endocervicitis and vaginitis.

Treatment. I ordered that the vagina be flushed with warm water morning and night, followed by injections of sulphate zinc, forty grains to one half gallon of water; I forcibly dilated the internal os and neck, and swabbed out the whole interior of the organ with the following: Carbolic acid, one part; tincture iodine, two parts; glycerine, two parts. A pledget of cotton with the same solution was left in the vagina, being pushed up against the external os after each irrigation. This treatment was repeated every third or fourth day. The first application was made November 7th, the last, December 17th, a period of about six weeks. The vaginitis disappeared, the tenderness about the womb subsided, and the flux simulating abscess ceased after the first application.

On the 17th of March, three months after dismissal, I was called to see the patient. At this time she supposed herself to be relapsing. An examination, with history, showed that she had become pregnant.

CASE 2. Mrs. B., aged twenty-two, highly cultivated, married about one year, sterile; husband healthy. She had been troubled with uric acid diathesis for two or three years before marriage. Menstruation was regular, but at times very painful, and there was much leucorrhea after each period. She was very anemic. A digital examination found nothing abnormal, except tenderness about the os. The speculum revealed inflammation of the cervical endometrium at the external os, with slightly everted edges and a thick whitish discharge coming from the canal. The cavity of the organ was explored with a sound. The depth was normal; there was no tenderness in the body, and no vaginitis.

*Read at the May (1890) meeting of the Kentucky State Medical Society.

Diagnosis: Chronic endocervicitis.

Treatment. Tonics, with simple warm-water injections twice daily. A local application of a weak solution of carbolic acid, with iodine and glycerine, twice a week (the solution gradually made stronger) for several weeks was made without much benefit. I then used nitrate of silver with iodoform suppositories, and did forcible dilatation. This continued treatment gave marked relief in a short time. I repeated the dilatations at intervals, with the result of a permanent cure in three months. She is now pregnant.

CASE 3. Mrs. F., aged thirty-five, mother of several children, has had womb trouble for several years. She had been treated at times with only temporary relief. Examination revealed inflammation of the cervical canal, with hard cicatricial tissue around the external os—a probable result of severe burning with caustics. She has suffered for some time with periodical spells, as she calls them, of epileptiform character, which are no doubt reflex in their origin, emanating from the sexual organs.

Treatment was similar to the above, except that a stronger solution of iodine and carbolic acid was used. The case improved markedly, but a complete cure was not effected.

CASE 4. Mrs. C., aged twenty, married about one year, got a fall about four months before I saw her. She had since been irregular in her menses. The function was performed with difficulty and the flow was scanty. She was also afflicted with leucorrhea.

Examination found anteversion, with a slight endometritis. I corrected the displacement and employed treatment similar to that used in Case No. 2, with complete recovery in a few weeks.

CASE 5. Mary D. (colored), unmarried, had a child at the age of seventeen. She came out of her confinement normally. I saw her April 24, 1890. I found her suffering from an intense vaginitis, with slight endometritis and urethritis, which was evidently specific in its origin, there being no previous history of womb trouble.

Treatment. Vaginal injections of warm water, followed by sulphate-of-zinc injections, forty grains to a quart of water, twice daily, were

ordered. One week later I saw her again. I found marked tenderness in the left inguinal region, with a distinct tumor. She had begun to have rigors, with exacerbations of temperature. A sound passed into the womb found the body extremely tender.

Diagnosis: Specific vaginitis, with consequent endometritis, corporeal and cervical, and salpingitis, with possibly circumscribed peritonitis. I ordered hot applications of water and turpentine externally, and hot-water injections *per vaginam*. I applied a solution of nitrate of silver to the external os and vagina. I continued this treatment for a few days, with very little relief.

On the 6th of May, after consultation, I decided upon a laparo-salpingotomy, but the family objected.

At this time the inflammatory exudation has extended downward to the left, pushing the uterus over to the opposite side and fixing it. The tumor can be plainly felt with the finger in the vagina, without making counter-pressure over the abdomen. The fever has about subsided. The patient has some appetite and less pain.

Remarks. It is not the purpose of this paper to discuss the etiology or pathology of endometritis, nor to lay claim to any special line of treatment, except in certain chronic cases that have resisted ordinary means, to recommend forcible dilatation of the cervical canal as a valuable addition to the usual line of treatment. I now practice it in every case, unless it be contra-indicated, as in forcible dilatation or in pregnancy. I have never seen this recommended as a therapeutic measure in the literature at my command.

SMITH'S MILLS, KY.

A CABINET STORAGE BATTERY FOR GALVANO-CAUTERY AND ELECTRO-MOTOR USE.

BY J. MORRISON RAY, M. D.

The galvano cautery and electro-motor have become necessary instruments in the armamentarium of the rhinologist and laryngologist. The ordinary plunge battery has been the one in general use for generating the force. It

is, however, as a rule so unreliable and annoying that its use has been restricted to a few who would see that they were kept in a

easily accessible, and at a glance one can discover whether the current is on or off.

It requires but little care. Once in six weeks a small quantity of sulphate of copper is added to each cell. The surface of the water has been covered with castor oil to prevent evaporation, and the plates of the storage battery are kept immersed in the fluid. A switch is so arranged that the storage can be fitted at nights, and the gravity cells detached during the day, thus preventing deterioration and waste. I have had added to the front of the cabinet an apron, that makes a most useful table for instruments during an operation on the nose or throat.

The motor used is a one eighth horse power machine of Waite & Bartlett pattern, and will stand several hours of continuous use; then, after a few hours' rest to the storage, it will resume work. The motor is a most useful attachment, being of great service in the removal of bony exostoses and deviations of the nasal septum. Dr. Holbrook Curtis brought it into popular favor a short time ago. I have found it far superior in many cases to any form of nasal saw used by hand force. The cabinet, made in highly finished antique oak, makes an attractive piece of office furniture.

These batteries can be procured through Messrs. Tafel Bros., of this city.

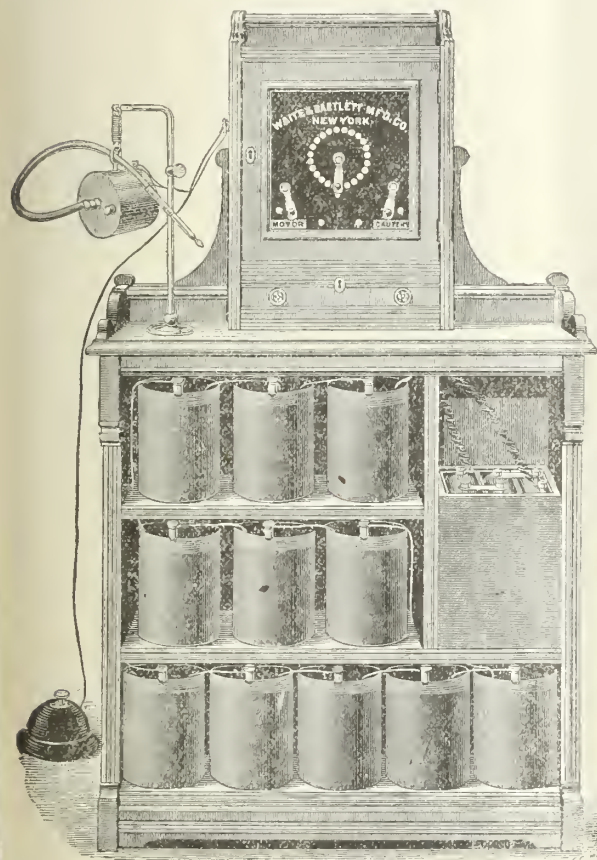
LOUISVILLE.

PREVENTION OF SUPPURATIVE MASTITIS.*

T. S. BULLOCK, M. D.

If the testimony of our female patients is to be credited, there is nothing with which woman is afflicted productive of so much suffering as "abscess of the breast." Even parturition, which is regarded as the acme of agony, is not excepted by those who, having undergone both, have had the opportunity of comparison. If such be the case, and we have no reason to

* Read before the Louisville Medico-Chirurgical Society, July 25, 1890. For discussion see p. 102.



proper condition. The incandescent system from the streets has also been brought into use. The objections to this are the high price per month charged and the danger of getting the wires crossed with other systems, thus destroying the rheostat or the instrument to be used.

At my suggestion Dr. Waite, of Waite & Bartlett, New York, has arranged a storage-battery cabinet in a manner that makes it the most desirable form of cautery battery that I have seen. It consists of a storage of three cells arranged in a cabinet with the ordinary bluestone cells for generating the force (as shown in the illustration). The rheostat is so placed that it is easily reached, and the amount of heat so regulated that the cautery point can be used at any heat desired. The switches are

doubt it, any method of treatment which will prevent its occurrence is the desideratum. In order to discover a remedy, a knowledge of the cause is important. As in many other cases, we are met on the threshold of investigation with conflicting opinions and theories. Let us take a look at the more important of these, and, comparing them with our own clinical experience, deduct therefrom if possible the best method of treatment. In the first place primiparæ are more often afflicted with this trouble than multiparæ; the right breast more frequently than the left (though, as far as I can see, there is no reason for the preference), and suckling women more often than non-suckling. It is seldom bi-lateral, and usually begins in the first four weeks after labor. It sometimes, also, occurs prior to labor. I have recently met with such a case, the only one I ever saw.

As to the cause: Of course the omnipresent "bacterium" is thought by some to play an important part. A lesion of the nipple furnishes the point of entry, and from thence the microbe finds its way into the tissues *via* the lymphatics or milk ducts. This view does not meet with widespread approval, because such activity of movement is not believed to be possessed by these micro-organisms. Simple irritation of the nipple is believed by many to be the cause. Milk stasis in certain parts of the gland is also assigned as a cause. Roser maintains that the retention of milk is not the cause, but the result of the inflammation, the excretory ducts being displaced by the swelling. The stasis theory more nearly accords with my observation and experience than any of the others advanced. From some cause the milk may coagulate in certain excretory ducts, and stasis and inflammation in the surrounding tissue result. Incomplete emptying of the gland by the child allows a great deal of milk to remain, and thus the circulation of the gland is interfered with. I have never yet seen an abscess which was not preceded by so-called "caking of the breast." If this be not due to occlusion of the duct from some cause or other I do not know how to account for it.

I have never seen a case of suppurating mastitis, when the painful "cakes and nodules" have been attended to, or when a breast

becomes painful and nodular, if, either by means of the breast-pump or careful kneading the breast from circumference to apex, a sufficient amount of milk be removed to make the breast perfectly soft and comfortable. We should then, by means of a suitable breast-binder, secure firm and uniform pressure. This is accomplished by careful padding with cotton. No part of the breast is allowed to sag, and when this binder is properly applied a constant oozing of milk will result. It is not to be removed unless the breast becomes uncomfortable. If it does, remove it, and rub out the nodules as before. It is surprising what a free flow of milk takes place after a few minutes of careful kneading. This kneading should always be done by the doctor and not left to the nurse. It causes no pain after the first few seconds, and no pressure at all is necessary. The "busy practitioner" of course will object to the time lost by such a method, but the results in my experience are worth considerable trouble. If, in spite of treatment, signs of inflammation supervene (I have never yet met with such a case), an ice-bag may be applied over the bandage. It gives great comfort and frequently prevents suppuration. I have never seen a patient take cold from such a procedure. I am aware that the majority of the profession favor uniform pressure without manipulation, but the results of the above described method have proven so satisfactory, and have been productive of so much comfort to the patient, that I as yet see no reason to abandon it, and I ask those of you who have never given it a trial to do so, if by so doing you prove not faithless to some pet method of your own.

LOUISVILLE.

WHAT wonderful things occur in America. The Hospital Gazette says that in America women are allowed to wear men's clothes, and adds: "We can not say how many other lady doctors (besides Mary Walker) have thrown aside women's attire in favor of that of men." We can supply this hiatus in the knowledge of our bright contemporary by informing him that not one of our female physicians has followed Mary's example.

Societies.

THE MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, July 25, 1890, J. M. Ray, M. D.,
President, in the chair.*

Dr. T. S. Bullock exhibited a case of shot wound. He said: "This man was shot through the chest with a 38-caliber pistol, the ball entering, as you see, at the sterno-costal junction, passing through the chest, and emerging midway between the shoulder-blades, about one and a half inches to the right of the spinal column. How it could pass in this line and miss the larger blood-vessels is somewhat singular. The amount of hemorrhage which this man had was appalling, but it promptly ceased externally when the external wounds were properly dressed. After spitting blood for a while, the man has made an uninterrupted recovery without fever, pus formation, or other unfavorable symptom."

Dr. A. M. Vance said: "I am much interested in this case, as it exhibits what can be done with this class of injuries. Sometime ago I met with just such a wound and just such a happy result. A 32-caliber ball in this case was shot through the left biceps into the chest and out on the same side of the spine. I saw the man two or three hours after his injury, and without probing the wound dressed the points of entrance and exit antiseptically, and kept the patient quiet. In two weeks he was walking about, to all intents and purposes well. He had an elevation of about two degrees till yesterday. His temperature was then normal, and he was discharged. The secret of success over what used to prevail I regard is found in not probing such wounds, but in closing them at once. The probe, it appears, is extremely dangerous, even more so than the ball. I have noticed that but very few chest wounds now come before the Pension Board among the claimants for injuries inflicted in the war."

Dr. J. W. Irwin, after some preliminary remarks, said: "Some years ago I saw a little boy eight years of age who had fallen upon the iron projection of the tail-board of a wagon. This

piece of iron was six or seven inches long, and it passed entirely through the chest. At that time there was not much said about antiseptics, and he recovered under simple dressing of the external wounds without any thing else. The result, it seems, was due to the fact that no large blood-vessels were struck."

Dr. D. T. Smith said: "It seems to me that in wounds of the lungs antiseptic dressings to the points of ingress and egress of a foreign substance can be of little value, because so long as respiration must be carried on the air must come in contact with the wounded points within. I have treated quite a number of these wounds myself, and they almost invariably recover. The relatively small portion of the wound that can be rendered aseptic would indicate how little the question of antiseptics enters into the results here."

Dr. C. E. Skinner said: "During my term at the hospital we had four cases of shot wounds, all of which recovered. It is a fact beyond dispute that wounds that are probed do badly, while those that are not do well. In one of the cases to which I allude the ball entered between the eyes and between the frontal and nasal bones. The external wound was dressed, and the patient did well. He never had a bad symptom, and his sense of smell even has not been interfered with. I suppose the ball is in there somewhere yet, for we never removed it."

Dr. William Bailey asked for an explanation of why, when the external wounds were closed, the man did not go on bleeding internally.

Dr. Bullock replied that there was a considerable amount of internal hemorrhage which escaped by expectoration, and another considerable proportion that underwent absorption without suppuration. "But the remarkable thing is that when suppuration does occur recovery often takes place. Many will remember the case of Deputy Hugh Rogers, who was shot through the lung with a Winchester rifle. He apparently recovered completely, only to be taken down several weeks afterward with a chill, fever, and sweats. In his case I opened the chest, and a large quantity of the most disagreeable and fetid pus I ever encountered was removed. He finally recovered entirely. These

*Stenographically reported by H. Allen Kelch, M. D.

cases demonstrate, it appears to me conclusively, that there is no such thing as traumatic pneumonia."

Dr. Douglass Morton exhibited an ovarian tumor, accompanying the exhibition with the following remarks: "This, gentlemen, belongs to the class called solid ovarian tumors. The rarity of their occurrence makes them interesting. This was removed last Saturday by Dr. Skinner and myself. The diagnosis before operation was doubtful, but the fact that in one or two points I could detect fluctuation led me to believe it to be a cystoma. It is in reality, however, a cysto-carcinoma or a cysto-sarcoma. Assuming it to be cancerous, these tumors occur in about three per cent of all cases. The mortality following operations for solid non uterine tumors is thirty-three per cent higher than for fibroids, for some reason. When this tumor was exposed it was found to have practically no pedicle, and it was deeply situated in the pelvis. According to Dr. Skinner's suggestion, we threw a strong cord around it and drew it tightly with an ecraseur. The fourth day this patient had a temperature of 100°, pulse 120, and a great deal of pain, and, fearful of peritonitis, I gave her epsom salts. The temperature fell at once, and she has since experienced no further trouble. This morning her temperature was normal. The tumor when removed weighed nine pounds. In passing a trocar deep into it no fluid was removed. As to consistency, it is very soft, almost encephaloid in character."

Dr. W. C. Dugan (present by invitation) exhibited two floating cartilages removed recently from the knee-joint. They were semi-lunar cartilages, and had no connection with the joint, but were floating loosely in the synovial sac.

Dr. A. M. Vance said: "Ordinarily when there are floating cartilages there is a large quantity of fluid along with them—in this case there was no perceptible increase. Another point of interest is the impunity with which we now open the knee. In a case I operated on some time ago I did the operation under cocaine; there was a large amount of fluid present, probably a pint. The patient was walking about in three weeks."

Dr. Dugan said: "Several have asked me why I made a transverse incision in this operation. I made the incision on the inside and transversely for three reasons: It will be remembered that the anterior fibers of the vastus externus pass horizontally outward and thus prevent the outward dislocation of the patella. The blood-vessels and the nerves that are given off and here distributed pass in a horizontal direction so that if you cut longitudinally you sever them, so the reasons for the transverse incision are three, and include muscle, blood-vessels, and nerves."

Dr. Bullock exhibited a vesical calculus weighing 4 dr. 37 gr. removed by the median operation from a man fifty seven years old by Dr. Wm M. Griffiths. The feet and legs of the old man were extensively edematous, which led to strong suspicions of renal affection; but a specimen of the patient's urine was sent to Prof. H. A. Cottell, who contradicted this suspicion, and the operation was done, with the result of complete relief to the patient.

Dr. Bullock read the paper of the evening on the Cause, Prevention, and Treatment of Mastitis. (See p. 99.)

DISCUSSION.

Dr. Douglass Morton said: "Some years ago I made use of a measure of treatment for threatened mastitis, consisting of the application of silk and collodion, which experience has not led me to change. I found I could apply them and get much more uniform pressure than I had ever been able to secure by other means. It is supposed a considerable number of cases occur in consequence of the entrance of microbes through fissured nipples. In the light of present facts we are almost bound to believe that a germ of some character must take part in the process of abscess formation."

Dr. John G. Cecil said: "I can not agree with the essayist as to the causation of the trouble. I have come to the conclusion that all abscesses of the breast are the result of germ infection. I believe that all abscesses are preceded by fissures or cracks, solutions of continuity, even though minute in dimension; and as for abscess of the breast, I have never seen one that was not preceded by trouble with the nipple. I be-

lieve the germ enters at a solution of continuity and travels by means of blood-vessels or lymphatics to the point of disturbance. Believing, as I do, the inflammation to be outside of the milk gland, I can see no occasion for the use of massage to relieve an obstruction; if it were due to milk stasis there could be little doubt of the value of massage. My plan of treatment, therefore, consists in padding the breast well after applications to the nipple, and I then put on a corset bandage after the manner of Dr. R. P. Harris, of New Jersey. I believe the bandage can be more evenly applied after the method of Harris than the straps as mentioned by Dr. Morton; certainly it is much more easily removed. If the nipple be much fissured and inflamed it is best to cover it up in the dressing and stop the nursing from that side, then with a bandage two and a half inches wide and fifteen or twenty yards long, the breast and chest are evenly bandaged over cotton padding and the pain from tension relieved by morphia administered with all due caution. I have seen a bandage put thus on a fissured nipple and breast threatened with abscess, and kept on for two weeks, and after removal the child placed again to the breast and the flow of milk rapidly re-established. Those cases due to traumatism might be an exception to the rule, but they would be independent of the process of lactation. The treatment that Dr. Bullock recommends for prevention is that I have followed up my life long. My good old grandmother, who used to occupy a large territory in this field, used to declare that in any case where a woman had an abscess of the breast, either the attendant or the nurse was to blame. If milk were not allowed to accumulate no abscess formed. I still think there are few and very rare exceptions to this rule. When I commenced the practice of medicine I commenced to put that teaching into practice, and I have had no occasion to regret it or to modify my views since. So impressed am I with the reality that these abscesses of the breast have accumulation of milk in the glands as first causes, that on several occasions, finding a woman alone and suffering, I have removed the milk with my own lips. A certain proportion of abscesses I do not doubt begin outside of the gland. Abscesses may begin anywhere;

with them the practice would be as with abscesses in other localities—poulticing and lancing at the proper time. Regarding the accumulation of milk as the cause in a large percentage of cases, the rationale of bandaging and massage becomes the same; accumulation exerts sufficient pressure to interfere with blood circulation. The bandage prevents that and compels the blood to move on, and no extravasation takes place. Kneading accomplishes the same purpose if it is continued. If it is stopped after an hour to be resumed at a later period then it does harm."

Dr. F. C. Wilson said: "The discussion so far has pertained entirely to the mechanical aspects of the subject. I recollect several years ago of reporting several cases wherein the use of the fluid ext. *phytolacca decandra*, in doses of five or six drops every hour, seemed to me to be almost a specific. I am certain at least that the distension in many cases was promptly relieved, and I have no doubt that it has saved many cases of serious trouble in my hands. I also have found if you can get rid of the accumulation of milk you have no further trouble, and therefore I think in nineteen cases out of twenty when abscess occurs some blame is to be attached somewhere. In these cases five, six, or ten drops of the *phytolacca* every hour act like magic. The same effect will be observed in a case of orchitis or epididymitis, acute ovaritis, or in the mumps."

Dr. Turner Anderson said: "The views expressed by Dr. Bullock are such as I have entertained for a long time. I believe there are few cases that experience justifies us in ascribing to traumatism. I am not so wedded to the view that we must have a specific microbe present to set up the inflammation, although I suppose there is a microbe present in every inflammatory process everywhere. There are cases, however, though they are certainly infrequent, in which we find suppurative mastitis, where the woman has nursed her child satisfactorily for some time. The breast becomes knotted, hard, and tender, followed by suppurative mastitis with inflammation of the nipple. I recognize such a thing as an inflammation of the gland of the character referred to by Dr. Cecil and Dr. Smith. This gland is

not exempt from the ordinary causes of inflammation, and we sometimes meet them just as we do cases of non-specific inflammation of the testicle. I believe that in a great many cases of this character, where we can not trace them to sore nipples, they are dependent upon malaria—the same influence that produces hepatic engorgement. In many cases, where we can not trace the cause of engorgement of the gland to milk accumulation, we find it to be malarial in character. I observe this frequently in the summer. I attribute it to malaria, because the trouble is so promptly relieved by anti-malarial treatment—a full dose of quinine giving almost uniformly immediate relief. Whether this is a consequence of malaria, or whether it is due to the peculiar influence of quinine as an antiphlogistic, might perhaps admit of discussion. I can understand why this drug should exert a decided influence upon the mammary gland; its effect upon the glandular system in general leads us to expect similar effects in cases of mammary inflammation. In cases, therefore, of threatened suppuration I deem it improper to neglect internal medication, and I would give quinine with more confidence in threatened abscess of the breast than in impending inflammation anywhere else. I would go a little further, and say something about local applications. With mercury in the form of ointment, or rubbed up with vaseline, applied and rubbed into the gland, we can do something toward relieving or aborting inflammation when it has already begun. I am a firm believer in the efficacy of mercury rubbed into glandular swellings, and before I apply a bandage I usually have blue ointment rubbed into the breast. It might be contended by some that it prevents the development and consequent noxious influence of microbes upon the structures, but I am inclined to attribute its grateful effects to glandular stimulation. To sum up, I believe most cases are due to trauma, and those that are not are simply accidental, or due to malarial influence.”

Dr. Thum said: “I believe ninety-nine cases out of a hundred occur from engorgement of milk. In an obstetric practice extending over some ten or twelve years, I have had to lance but one breast. In cases of mammary inflam-

mation I have insisted on massage and drawing the milk where the baby did not do it. I believe in germ causation in abscess in many instances, but not in this; as soon as the flow of milk is again established relief is obtained, and as I say, in private practice but very few will have to be lanced, and therefore I regard milk engorgement the prime factor in most cases.”

Dr. Douglass Morton said: “I have a patient, a girl seventeen years of age, who has been a victim of masturbation for eight or ten years, who is now pretty well ruined physically and mentally. I have suggested to her guardian removal of the ovaries, with a view to subjugation of the sexual passion, and would ask the opinion of those who have had experience as to its probable efficacy in a case of this character.”

Dr. Vance said: “In a case of reflex torticollis that came under my charge about three years ago I removed the ovaries with decided benefit to the torticollis. So far as I am aware it had never been suspected that this woman was a masturbator; the fact was only revealed by the constant and excessive staining on her clothing during convalescence from the operation.”

Dr. Bullock said: “Most cases of masturbation are more frequently as the result of mind disease, than mind disease as the result of masturbation, and therefore the removal of the ovaries has but little effect.”

LOUISVILLE SURGICAL SOCIETY.

Stated Meeting, July 17, 1890, Dr. A. M. Cartledge, President, pro tem., in the chair.

Dr. Turner Anderson exhibited a patient (a man aged twenty-two) who had presented all the symptoms of pneumo-pyothorax. The doctor first saw him May 29, 1890. At this time the left side was bulging so as to produce great deformity. There was also great anasarca. The patient looked as if he were in the last stage of Bright's disease. He had had homeopathic treatment; then had been tapped on the left side, half way between the last rib and the crest of the ilium. The physician got pus at this point, the sac having been sufficiently depressed. On hearing the

history of the case, Dr. A. concluded to secure thorough drainage. He made an incision over the seventh intercostal space and drew off a large quantity of pus, after which he put in a drainage-tube. The side soon shrank, and the tube failed to let out the matter. Ten days ago, Dr. Bullock giving chloroform, Dr. Anderson resected the seventh rib and put in a new tube. Before this was done the patient was expectorating a large amount of matter. This ceased soon after complete drainage was secured. The tube now goes straight into the lung for a distance apparently of six inches. Breathing is now normal and the shape of the chest is comely. The resection was strictly subperiosteal. The patient has still some edema of the lower extremities. The kidneys are sound. So great was the general dropsy that the surgeon had to cut to the depth of four inches before he reached the rib.

DISCUSSION.

Dr. W. L. Rodman: This case shows that Dr. Anderson has had better results than other members of this Society. Every case so far reported by the Fellows, wherein the lung was communicated with, had been followed by death. So far as the original opening was concerned, if the pus was there, it was made at a point none too low.

Dr. W. O. Roberts: Dr. Anderson did the right thing when he resected the rib. If you can get the finger into the opening, don't resect; but when that can no longer be done, you should resect. Anasarca was probably largely due to displacement and consequent obstruction to circulation. Cases like these are those wherein sudden death sometimes follows the operation.

Dr. Ap M. Vance favors doing the full operation at the first, and then free and frequent irrigation afterward.

Dr. Roberts showed a uterus removed for the relief of excessive pain and profuse menstrual flow. The patient was the mother of two children, the younger eleven years old. Laceration of the cervix followed the last birth. He had previously removed the ovaries, which showed some small cysts, but the patient was not relieved. The uterus shrank. A diph-

theritic membrane formed on the lacerated surface, and the pain continued. The womb was brought down and the cervix curetted. As it was hard and almost impermeable, he decided to remove the entire organ. The operation was done two weeks ago. The patient has gone home apparently relieved. Vaginal hysterectomy was done; not a bad symptom followed. Several years ago, the patient having an ovary removed, the bladder was opened. Urine escaped through the abdominal wound. The patient did well for awhile, and then complained of frequent urination. Eczema about the old wound was marked. An examination showed stone in the bladder. He removed it through the urethra. The eczema got well. No old stitch was found. The bladder also got well.

Dr. R. also reported the following: A man, aged sixty, broke a catheter in his bladder. He had been using the same catheter for six months. Dr. R. tried the lithotrite, but could not remove it. He advised perineal section; this was refused. In three weeks severe cystitis supervened. Dr. R. then did the median lithotomy and removed the piece of catheter, which was thickly incrustated with phosphates. The patient got well and went home.

Dr. Anderson said he was present at the hysterectomy. He was pleased with the operation. Where, as in this case, the womb is movable, the operation is done with little trouble. When, however, the organ is fixed and high up in the pelvis, its removal is a very difficult piece of surgery.

Dr. A. M. Cartledge continued his report of a vaginal hysterectomy done some months ago for malignant disease. The disease has returned. Relative to hysterectomy, the speaker said that the conformation of the vagina and the height of the uterus have much to do with the ease or difficulty of the operation. In some women the os would seem to be normally from one to two inches from the vaginal orifice. In such the operation is very easy. In others, a long, narrow vagina and high-up womb make the operation very difficult.

Dr. C. reported a case in the person of a young man who broke a new Nélaton catheter in his bladder. The doctor operated and

thought he had removed the entire piece. Cystitis supervened. In a few weeks the patient returned, and examination revealed the presence in his bladder of a large stone. The surgeon did the median operation and removed a piece of catheter thickly incrustated with phosphates.

Dr. H. A. Cottell (present by invitation) said, relative to the case of malignant disease reported by Dr. Cartledge, that a careful examination of the specimen, after embedding in celloidine and cutting with a microtome, showed the characteristic features of carcinoma. A section cut free hand at the time of removal showed nothing but embryonic cells. A report based upon this examination would have made the diagnosis sarcoma of the uterus; but as sarcoma is primarily a very rare disease in this organ, the speaker concluded that the first cut must have been through some inflammatory area, and so withheld opinion until a typical portion of the uterus had been examined.

Dr. John G. Cecil had before reported on a case of vaginal hysterectomy. The womb was fixed. He should never attempt this operation in cancer if the womb was fixed, since this shows that the disease has invaded the pelvic tissues. In the case referred to, death had followed since his former report. He has a case of complete procidentia wherein he urges hysterectomy for the comfort it will give the patient. It is hard to remove a piece of catheter with the lithotrite, because the surgeon can not tell whether the instrument is grasping the bit of catheter or the bladder mucous membrane.

Dr. Rodman: I saw the hysterectomy, and was impressed with the ease of the operation, owing to mobility. He had once done perineal section for the removal of a glass rod from the bladder.

Dr. I. N. Bloom said the journals show that few succeed with the lithotrite in such cases as Dr. Roberts reports. It is very seldom that any thing other than a lithotomy succeeds. He can't see how a stone in the bladder kept up eczema in Dr. Roberts' case.

In regard to dilating the female urethra, he asked Dr. Roberts once before if he had ever

met with incontinence as a result. As the doctor answered that he had not, he is willing to attempt the operation. Forty per cent of the cases reported by the authorities have incontinence—a most disagreeable condition.

Dr. Palmer reported a case seen to-day wherein the patient had passed an inch of catheter nine months after it was broken off. The bit was perfectly clean.

Various members answered Dr. Bloom that they had dilated the urethra of the female with no permanent incontinence.

Dr. Roberts agrees with Dr. Cecil that cystotomy is the thing to do. If you catch the piece of catheter with a lithotrite, it is apt to break.

Dr. Rodman reported a case of fracture of both clavicles in a person upon whom a horse had fallen. The case is doing well.

Dr. H. H. Grant reported the case of a man recently thrown against a brick wall, striking his knee. He suffered great pain. Examination revealed no displacement, but crepitus could be heard. Stellate fracture was diagnosed. A fixed dressing was applied. After three weeks callus had formed, but there was still pain, and the man could not use the limb. He is now walking about in a light plaster dressing. He had also a fracture of the clavicle. There was much swelling in the part, but the patient is doing well. Stellate fracture of the patella is very rare.

E. R. PALMER, M. D.,
Secretary.

Reviews and Bibliography.

An Introduction to Pathology and Morbid Anatomy. By T. HENRY GREEN, M. D. Sixth American from the seventh English edition. Revised and enlarged by STANLEY BOYD, M.B., B.S., Lond., F.R.C.S., Eng. Illustrated by one hundred and sixty-seven fine engravings. 539 pages. Philadelphia: Lea Brothers & Co. 1889.

Green's Pathology and Morbid Anatomy has been so long before the profession, is so well known and so extensively studied, that any extended comment would appear useless. Yet, as setting an example for future works, it is well to point out the excellencies that must be

surpassed before another can claim its place in public favor.

The first feature that strikes the reader is its fine literary style, the clearness of its arrangement, and the lucidity with which all important points are presented.

The author accepts the doctrine of evolution as no longer a matter of debate, but one of the accepted dicta of science and philosophy upon which the decisions of scientific judgment are to be based.

With him, if a fact is asserted which is not consistent with evolution, the presumption is against it as a fact. In this, however, he is in line with every systematic scientific writer of the decade.

Passing to particular chapters, one of the most interesting is that on inflammation. The author rejects the views of Stricker, who held that the connective tissue cells in the process of inflammation reverted to their embryonic form, and with some modification adopts the views of Conheim, that the leucocytes present in inflammation are derived by proliferation and diapedesis of other leucocytes. He also reasserts the views of Lister, that the primary factor, the initial movement, is injury to the inner coats of the arterioles. Lister's view in this respect he thinks established by the experiments of Senftleben, who found that if he killed the tissues in the center of the cornea, by means of chloride of zinc, without destroying the epithelial plate, no proliferation of cells took place. If, however, the injury was done close to the iris, the adjacent cornea soon became clouded with leucocytes.

The doctrine of leucocyte migration is not only interesting on account of what is known as bearing on this point, but as indicating the trend of scientific opinion. But a few years ago, to have taught what is now accepted in regard to white cells would have been considered the work of idle fancy. Now we find the leucocytes, whose function and origin were but yesterday a mystery, coming to be considered the most important element in the system.

All progress in this direction is an approach to the recognition of intelligent action in vital processes; and in our opinion the goal will not

be reached until that principle is everywhere recognized.

We expect the next step will be the discovery that the lymph cells are but baby leucocytes, that have left the parent in the blood stream and crept through the walls and tissues to reach the milk in the lymph spaces. This is a task for the sharp-eyed microscopist of the future.

The chapter on vegetable parasites is superb. Of course, in the short time that has elapsed since the discovery of diseased germs, it is impossible that all difficulties should have been cleared up in this department, especially when we consider how many investigators have been in the field, biased by excessive sharp-sightedness or too much fertility of imagination. Yet for all one can not but wonder how little seems to have been known in pathology before these things were known, and how much beauty recent knowledge adds to pathological studies.

D. T. S.

Transactions of the American Surgical Association. Vol. VII. Edited by J. EWING MEARS, M. D., Recorder of the Association. 225 pp. Philadelphia: Printed for the Association, and for sale by P. Blakiston, Son & Co. 1889.

Of this volume of Transactions it may justly be said that it compares favorably with any thing of the kind that has appeared in this country, and would do no discredit to any similar society in Europe.

The presidential address, by David W. Cheever, M. D., of Boston, dwells on the marvelous strides made by man from the primitive times to the present, and predicts unlimited achievements for surgery in the future.

The surgical work is inaugurated by Dr. Warren, of Boston, who advocates his method of early diagnosis of malignant growths by removing a part with a punch for microscopic examination.

Dr. Claudius H. Mastin follows with a superb paper on hernia, comparing the various methods adopted for its cure. In the discussion that followed, the conclusion of the essayist, that no fixed rule of procedure is established, seemed to be borne out by the speakers, among whom were Dr. Richardson, of Boston, Dr. D.

Hayes Agnew, Dr. W. W. Dawson, Dr. McLane Tiffany, Dr. D. W. Yandell, and others.

Dr. Lewis A. Stimson read a paper on Some Modifications in the Technique of Abdominal Surgery, limiting the Use of the Ligature *en masse*.

Dr. Stimson holds that the ligature *en masse* should be used only in those cases where the clamp, from some hindrance, can not be applied. In all other cases he would use the separate ligature.

Another paper of wide general interest is a contribution to the history of gunshot wounds of the intestines, by Dr. Theodore A. McGraw, of Detroit, Mich. Dr. McGraw is an advocate of a much more general application of conservative surgery in these cases than is now the fashion. After a large number of experiments on animals living and dead, he has come to the conclusion that bullets are not materially deflected on penetrating the abdomen, and that it is good practice to eviscerate a patient only in those cases where hemorrhage is uncontrollable, or where there is evidently a discharging wound which can not otherwise be found. The paper is altogether a strong plea for conservatism in the treatment of gunshot wounds of the intestines.

In the discussion participated in by Drs. D. W. Yandell, L. Nancrede, Kinloch, J. Ewing Mears, C. H. Martin, W. W. Keen, F. S. Dennis, and S. W. Weeks, the experiments of the essayist as to a ball proceeding uniformly in a straight line after entering the cavity were not thought to be borne out by the experience of the speakers. The drift of opinion, however, was toward a greater conservatism than has lately characterized the treatment of gunshot wounds of the intestines.

Intra-cranial Tumors. By BYROM BRAMWELL, M.D., F.R.C.P.E., F.R.S.E., Lecturer on the Principles and Practice of Medicine in the Extra-Academical School of Medicine, Edinburgh. With one hundred and sixteen illustrations. 370 pp. Price, \$4.50. Philadelphia: J. B. Lippincott & Co. 1888.

This contribution to the diagnosis and treatment of intra-cranial tumors is based mainly upon the author's own clinical experience,

though when thought necessary by him, he has made free use of the observations and opinions of other observers.

To announce that a work is from the pen of Byrom Bramwell on any subject in medicine he may choose to investigate, carries with it the presumption and the guarantee of the highest excellence; and this work is no exception. It will not be safe, however, in the present unsettled condition of views of cerebral localization among the leading thinkers and observers, to accept without reserve the conclusions of any.

To one who has made no original investigations, but has merely made a comparison of the contributions of others, it does not seem easy to believe that hopes of distinct localization of function, and therefore of disorders of the brain, are not destined to disappointment. More and more it is coming to be recognized that intermingling of cells of separate functions in the brain is too extensive, and indirect disturbance of functions too great, for a satisfactory working system of localization to be ever evolved.

D. T. S.

A Text-Book of Animal Physiology. With Introductory Chapters on General Biology, and a Full Treatment of Reproduction. For Students of Human and Comparative Medicine and of General Biology. By WESLEY MILLS, M.A., M.D., L.R.C.P. (Eng.), Professor of Physiology in McGill University and the Veterinary College of Montreal. With over five hundred illustrations. 690 pp. Price, \$5.00. New York: D. Appleton & Co. 1889.

The author has presented this treatise under the conviction that the welding principles of evolution have not hitherto been sufficiently recognized in any work on physiology. He very justly contends that it is illogical to conclude that functions determined to belong to one group of animals are to be ascribed to like organs in whatever animal found, and especially as relates to man.

Throughout the work a persistent effort is made to impress the necessity for remembering the absolute interdependence of all parts. As an illustrative instance of this may be mentioned the varying degrees of the power of digestion, according as the tissues are or are not

in need of nutrient material. The author does not, however, go so far as Wundt and some other philosophers in insisting that the mind resides in all parts of the body.

In the origin of species he does not think the notion of Darwin, ascribing it to spontaneous variation and natural selection, alone sufficient; and for this conclusion, as pointed out long ago, there is good reason. The chances are too great against the loss of a given variation by breeding with forms that do not possess it. The same objection also lies with still greater force against sexual selection. However, to the doctrine of evolution in general, no man of thought, candor, and learning now offers a denial.

Without going further into detail, it may be said of this book, that while inferior in thoughtfulness to Carpenter, and in lucidity and interest to Marshall in so far as he treats comparative physiology, owing to the fact that it is up to date and withal well written, it is the book of the day for the student of general biology. Indeed the ambitious student of inquiring mind will find that a study of this work will give him an insight into human physiology hard to gain when its study is approached in some other way. We commend it unreservedly. D. T. S.

Spinal Concussion: Surgically Considered as a Cause of Spinal Injury, and Neurologically Restricted to a certain Symptom Group, for which is suggested the designation Erichsen's Disease, as one Form of Traumatic Neuroses. By S. V. CLEVENGER, M. D. With thirty wood-engravings. 359 pp. Price, \$2.50. Philadelphia and London: I. H. Davis & Co. 1889.

In this work the author, in addition to a copious reproduction of the views of various writers who have treated of spinal concussion, adduces some new views of his own for the explanation of certain symptoms which he thinks have not hitherto been satisfactorily explained.

This new view is that the spinal sympathetic nervous system is the main seat of the disease, and that as a consequence the cord functions are deranged. The view seems to have been suggested by the objections opposed to the opinions advanced by Erichsen in his famous mono-

graph, one of which is that the spinal cord lies so secure in the canal that its injury by indirect violence is improbable, and that concussion of the brain, which is so much easier, accounts better for the symptoms. The author, finding among the numerous threads that suspend the cord in the canal a large number of sympathetic nerve fibers, tender and delicate, assumes that injury of these is really what occurs in spinal concussion. His reasoning, and the facts upon which his reasoning is based, do not seem to justify for his contention a higher position than that of an hypothesis.

Indeed, in view of all the evidence, it is difficult to accord more than the verdict of probability to the fact that such a condition as is commonly known as spinal concussion really exists; that is to say, cases where only molecular injuries exist, undiscoverable except by modification of their function, and giving rise to the complex symptoms found in what the author would call Erichsen's disease.

What is needed, however, to clear up the matter is not long dialectic dissertations carried on in a spirit of contention, but careful records of cases, with autopsies, at competent hands.

Of the literary style of the author somewhat can be said in disparagement. There is a constant disposition to use nouns as adjectives, after the style of a literal translation of German, which sometimes makes the reading harsh to painfulness.

Owing to the liberal citation of the views of various authors, the gist of what has been written may be had in this volume.

In a chapter on Medico-Legal Considerations the author severely scores those medical men who lend themselves as instruments for corrupt aims in damage suits, whether for plaintiffs or defendants.

Nor does he spare medical schools, being especially severe on professors, whom he accuses, with bitterness, of being in many cases woefully ignorant and deficient. This has a strange sound, coming from Chicago, where, judging from the titles that appear in the catalogues, one might fancy that some literary Hutchinson or Armour had unloaded a "corner" of LL. D.s on the medical colleges. D. T. S.

A Text-Book on Diseases of the Eye. By HENRY NOYES, A. M., M. D., Professor of Ophthalmology and Otology in Bellevue Hospital Medical College; Executive Surgeon to the New York Eye and Ear Infirmary; recently President of the American Ophthalmological Society, etc. Royal octavo, 733 pp.; richly illustrated with chromo-lithographic plates and two hundred and thirty-six engravings. Price, bound in extra muslin, \$6; in sheep, \$7. New York: Wm. Wood & Co.

This most excellent text-book comes rather late for a review, yet it is so valuable a work that we desire to recommend it to physicians and students who wish a reliable treatise on eye diseases. It is an elaboration of the book by Dr. Noyes in Wood's Library, and is the most systematic and exhaustive work on the subject by any American author. It would be useless for me to give it an extended review. To quote the opinion of a distinguished specialist, "it is a brilliant testimonial of the extensive knowledge, past experience, untiring industry and literary ability of its celebrated author."

J. M. R.

Transactions of the New York State Medical Association for the Year 1888. Volume v. Edited for the Association by ALFRED LUDLOW CARROLL, M. D. 610 pp. New York: J. H. Vail & Co. 1889.

The State Medical Association of New York is fortunate in having in its lists many of the ablest medical men in America, and more fortunate still in having inaugurated a plan of laying out its work in such a way the topics that most need elucidation are brought under discussion and at the hands of men best able to do them justice. Hence the great value of its transactions, proving as they do a mine of useful knowledge. The Transactions of 1888 add another superb volume to the records of the Association.

D. T. S.

At a meeting of the Berlin Municipal Council, on June 12th, it was decided that a convalescent home for lying-in women should be established at the expense of the city. A sum of 140,000 marks (\$35,000) (£7,000) was voted for the purpose.

Correspondence.

LONDON LETTER.

To one desirous of obtaining clinical and hospital advantages, London offers to him a field tempting beyond expression in its almost unlimited opportunities. London is particularly adapted for the specialist. Her position as metropolis of the world gives assurance of almost unlimited clinical advantages; the vast accumulations of wealth have enabled her philanthropic population to erect special hospitals, where the most approved appliances and the best of medical attention can be given her indigent poor. The surgeon, the ophthalmist, the neurologist, or the specialist in almost any other branch of medicine has only the pleasurable uncertainty of selecting which particular hospital or hospitals he will attend.

There is in Queen's Square a massive pile of building known as the National Hospital for Nervous Diseases. It is here that London's renowned neurologists devote many hours weekly to clinical and hospital work. This hospital can probably boast of more distinguished neurologists than any other institution of its kind. Among those who at present compose its staff are Ferricr, Hughlings Jackson, W. R. Gowers Buzzard, Victor Horsley, and Buvor.

Furnished with letters of introduction to these most distinguished gentlemen, I, through their influence, secured every advantage which London could afford in a neurological way. In the large *clientele* of this hospital the suspension treatment in locomotor ataxy has been tried with sufficiently good results to recommend its further use. The combination of cerebral and spinal localization with the surgeon's knife has brought about many results never dreamed of before. Some of the cures effected would sound like a tale taken from the Arabian Nights but for the sober fact of seeing the unmistakable results before you. One case I recall especially. A woman, a bedridden paralytic for years, who upon the removal of the spinous processes of three vertebrae (dorsal, I believe), under the strictest of antiseptic precautions, resulted in recovery and the use of her lower limbs. Electricity apparently has lost none of its prestige

in London, for the best of authorities recommend it highly both in private and hospital work. The use of mechanical appliances to overcome deformities resulting from nervous diseases were numerous and interesting. Among others was one used for extending the spine after operations. It consists of a plaster-of-paris or stay jacket extending from the axillary space to the crests of the ileum, into which are fixed hooks; from these cords are run over pulleys at the lower end of the bed, and so arranged that weights can be placed upon them proportionate to the amount of extension desired. Extension of the upper half of the spine is made by pads under the arms to which weights are attached. For those suffering from dyspnea, or from any cause unable to recline, a simple device is in use in the hospital here, which an ordinary carpenter can make. It consists of two rods let into blocks, placed far enough apart to allow the bed between. Upon this a board is nailed for the arms to rest; a second elevation, by means of short uprights, on which a short board is nailed. This is covered with a pillow or padded.

The progress or retrogression of a case of epilepsy is interesting, but keeping a record of the number of attacks, the time, and the day of the month on which they occur, where there are a large number attending the clinic, is, to say the least, irksome. To overcome this an arrangement, very simple and easily kept, is used in the hospitals here. It is a table with dates and spaces so arranged that the patient can keep a record of his seizures. The treatment of epilepsy by borax has received considerable attention lately. It is prescribed in fifteen to thirty grain doses three or four times daily till vesication of the lips or gastric disturbance forbids its further use. It is mostly used in those chronic cases which have failed to succumb to the treatment with the bromides.

Space forbids my dwelling longer on a field so large and interesting. I shall always recall with pleasure the warm reception I received at the hands of the English neurologists, and especially do I wish to thank Dr. Ferrier for his many kind attentions socially and for the extension of hospital privileges so rarely granted a stranger.

CURRAN POPE, M. D.

LONDON, March 15, 1890.

Abstracts and Selections.

HEART DISEASE IN PREGNANCY AND LABOR. The subject of heart disease complicating pregnancy has lately on more than one occasion occupied the attention of our Society. In October, 1887, Dr. Berry Hart read a paper on mitral stenosis as a complication, giving at the same time the reports of two cases which had been under my own care; while on the same date Dr. Ballantyne fully recorded another similar case. Three other cases were recorded by Dr. Berry Hart in May, 1889, and one by Dr. Fraser Wright in last July. The subject is of such importance that I need hardly apologize for relating at some length the following case, which was treated in the Edinburgh Maternity Hospital during the time that I was Resident Physician. The case, which was under the care of Dr. Halliday Croom, to whose kindness I am indebted for permission to lay these notes before you, was one of pregnancy complicated by aortic stenosis and incompetence, together with mitral stenosis and incompetence.

Jane C., aged twenty-four, primipara.

History. Her mother is still alive and well; no history as to father. When about ten or eleven years old she had scarlet fever and measles, followed immediately by smallpox; from these she recovered well. She does not know that she has ever had rheumatic fever, but has suffered at times from pains in her wrists. She has always been fairly strong, but as a general servant she has done a great deal of hard work. About two or three years ago she noticed that her feet were swollen at night; this condition, however, passed off without treatment. At the end of 1886 she began to be troubled with shortness of breath and palpitation on making any exertion. In the beginning of January, 1887, she caught a cold which kept her in bed for a day; there were no special pains in the joints. She last menstruated on 9th January, 1887. About this time she had severe pain in her left side, which soon improved; but in the beginning of April it returned, and she was admitted into Dr. Affleck's ward, Royal Infirmary, Edinburgh, on 8th April, complaining of shortness of breath and pain in her left side, the pain being shooting in character and often passing up into both shoulders. At the time of her admission into the infirmary she suffered a great deal from giddiness, with pains in her head. She never had any morning sickness.

I am indebted to Dr. Affleck's kindness for the following notes of her condition while in his ward:

Circulatory System. Pain severe in left

mamma; slighter pain on inside of right mamma; slight palpitation; dyspnea, especially at night; visible pulsation in episternal notch and beating of carotids; apex beat in fifth interspace, about two inches from sternum, feeble and with no thrill; slight thrill between second and third interspaces; slight thrill in episternal notch. Heart not enlarged. Over mitral area the first sound is replaced by a soft blowing murmur, which is propagated round to the axilla. Over aortic area systolic and diastolic murmur heard, harsher and more prolonged than mitral; murmurs conducted up vessels and down sternum. Pulse 80, and regular. Respiratory system normal. At the end of April there was some edema of the feet on standing. She was treated with digitalis, iron, and arsenic. On 1st May sickness after every meal commenced; on 10th May stirrage was first felt; on 13th May she had epistaxis; on 22d July she had irregular pains over the abdomen, together with difficulty in micturition; on 24th July she was in bed with a painful swelling and ecchymosis in the upper part of the left thigh, and with severe vomiting. On 25th May there was some hematemesis. She was now put upon milk diet, the digitalis mixture stopped, and she was ordered bismuth and opium powders, with ℥ss . of brandy every four hours; warm opium fomentations were applied to the thigh. On 28th July the pain and ecchymosis were disappearing. From this time until 15th September, when she was sent to the Maternity Hospital, she had occasional hematemesis, extreme prostration, and also sleeplessness at night; she vomited three or four times a day for two or three days at a time, with intervals of a week or two, during which she was better. She at times had some slight hemoptysis, and often required to sit up in bed in order to breathe at all. Her condition all this time was most critical.

After admission to the Maternity Hospital on 15th September her condition improved considerably; she was kept upon milk diet, and treated with bismuth and opium; ℥ss . of brandy was given three times a day. She had no further sickness except once after taking castor oil. She was rarely troubled with breathlessness except at nights now and again. The opium was gradually diminished in quantity, and the brandy was stopped for a time, while she was also allowed a little solid food. Dr. Byrom Bramwell examined the condition of her heart, which he found to be only slightly enlarged; the apex beat was displaced outward (probably by the uterine tumor); over the mitral area was a distinct presystolic murmur, together with a slight systolic murmur, which was conducted toward the axilla; over

the aortic area were heard systolic and diastolic aortic murmurs, the systolic being very well marked. These were conducted up the vessels and down the sternum.

On 5th October she got up for an hour, and continued to do so on most days after this. On 14th October she complained of pain in her back and left side, also a little sickness. On 15th October pains still continued; considerable dyspnea during the night. These pains passed off, but recommenced at 11:30 P. M. on 18th October, when the breathing also became exceedingly troublesome. On 19th October she was much better; the bismuth and opium were stopped, and she was ordered ℥℥ of tr. of strophanthus (1 to 20) every four hours. On 23d October it was determined to try and bring on the labor, as she was already a week past her time, and was becoming extremely nervous lest the new quarter, bringing with it fresh doctors and nurses, should arrive before she was well on the road to recovery. Consequently, at 11:30 A. M. on that day, under chloroform, I separated the membranes for about one inch round the cervix with my finger and gave a hot douche. A large Barnes' bag was then placed in the vagina, and only removed to give a hot douche every four hours. No pains resulted from this. On 25th October, at 1 P. M., Dr. Croom, with some difficulty, without chloroform, passed a large-sized bougie for about one inch and a half between the posterior wall of uterus and the membranes; a hot douche was then given every four hours. Early on 26th October the pains began, but were feeble and useless at first. During the evening and night of 26th October she had frequent pains, and became extremely hysterical. Chloroform was given during most of the pains. She complained of severe stabbing pain, especially during the labor pains, in the precordial region and passing up into the left arm.

During the pains the pulse became more rapid and much weaker and less regular; between the pains it was about 90, full and regular. She continued in this state all night and during the whole of the next day, the os dilating very slowly. She was given ℥℥ of tr. of strophanthus every four hours, and ℥ss . of brandy every three hours, with beef-tea at frequent intervals.

At 5 P. M. on 27th October 25 minims of tr. of opium were given, but she vomited it at once. She was becoming extremely weak and exhausted, while the difficulty in breathing was so great at times that she had to sit up in bed in order to breathe at all. At 7:40 P. M., when the os was the size of a crown piece, the membranes spontaneously ruptured high up and a certain amount of liquor amnii escaped. At

9:40 P. M. Dr. Croom saw her, and advised that the labor should be ended at once. She was then put deeply under chloroform, and after dilating the os with the fingers I applied forceps and delivered the child shortly after 10 P. M. The placenta was expressed ten minutes after, and she was then allowed to come out of the chloroform, during the administration of which she had been extremely sick. No ergot was given, as a certain amount of hemorrhage was thought desirable. There was a good deal of bleeding, which had to be checked later by hot douches. After delivery the pulse was 118, and fairly full; half an hour later it was 96, full and regular. She was very sick for some time, and complained of sore throat; the precordial pain was entirely gone, and never reappeared. The child was a healthy male, 23 inches long, and weighing 9 lbs. 10 oz., being the largest child born in the Maternity during the quarter. The puerperium was perfectly normal. She was not allowed to nurse her child. There was no trouble with the breasts, as she had very little milk. She was kept on the strophanthus until 29th October, when the dose was reduced to M4 every four hours; on 31st October it was further reduced to M2. Her breathing was perfectly easy now, and recovery was rapid and uninterrupted. On 7th November she was sent back to Dr. Affleck's ward, where the report of her cardiac condition was given as follows: A distinct precordial thrill exists; over the mitral area the first sound is preceded and replaced by a murmur which is conducted into the axilla; the second sound is impure; over the aortic area both sounds are replaced by murmurs which are conducted up the vessels and down the sternum. After a short stay in this ward she was dismissed in fairly good health, but after undertaking the duties of a domestic servant she again broke down; a short rest, however, soon restored her to comparative health, and when I last saw her, about fifteen months ago, she was able to undertake light domestic duties.

(A series of pulse tracings were taken before, during, and after labor, and a few of the more typical of these were shown, in order to give some indication of the condition of her circulation.)

In all the cases which were recently brought before the Society the cardiac lesion has been only at the mitral orifice; in this one, however, the main lesion was probably at the aortic orifice, although the mitral valves were at the same time stenosed and incompetent, so that the case forms a fitting and interesting addition to the series. The case is a remarkable one, in that there were numerous and extensive cardiac lesions before the commencement of

pregnancy; and it was interesting to mark the increase of existing symptoms and the development of new ones as pregnancy advanced and an extra strain was thrown upon the already overtaxed heart, which, however, rapidly regained its former condition as soon as the labor was completed. When in Dr. Affleck's ward she was for a time in a most critical condition, and it seemed almost as if she were bound to die from exhaustion consequent upon the persistent vomiting; yet she recovered from this, and the interesting point is, that not only did premature labor not supervene, but she even went beyond the ordinary period of pregnancy.

It is generally said that mitral stenosis is the most dangerous heart lesion which can occur as a complication of pregnancy, and that the other lesions are dangerous to a much less degree. The explanations of this are far from satisfactory, and have been fully discussed by Dr. Angus Macdonald in his work on Heart Diseases in Pregnancy, etc., so that it is unnecessary to refer to them further here. The purpose of this paper is to try and show that the great cause of danger is venous congestion, systemic and pulmonary, and that, since this is produced in the early stages of mitral disease, especially mitral stenosis, therefore this is the most dangerous lesion; but that, since it also appears in the later stages of aortic disease, therefore these become equally dangerous in the later stages, although they are less so when the disease is not so far advanced; in other words, the danger of heart disease as a complication of pregnancy and labor depends more upon the *extent* of the lesion than upon its *nature*.

In order to establish the truth of this proposition it will be necessary shortly to consider (1) the effects of pregnancy and labor on the normal circulation; (2) the effect of the various heart lesions on the normal circulation; and (3) how these effects interact on one another.

1. During pregnancy there is increased peripheral resistance, due to the circulation of the blood in the placenta, but this is met normally by a slight hypertrophy of the left ventricle of the heart. During the first stage of labor the pains probably cause an increased strain upon the heart, while its action will be weakened to some extent by the exhaustion which follows from the acute physical suffering. During the second stage of labor, however, the bearing-down pains come into play, and the patient, shutting her mouth, presses with all her abdominal muscles, so that there is considerably increased strain upon the heart and some embarrassment of the pulmonary circulation, while the venous portion of the systemic circulation becomes more or less engorged, so that the right

side of the heart tends also to become engorged with blood. This must be obvious to any one who gives the question any consideration, and needs no further explanation. During the third stage of labor, as soon as the placenta is separated and expelled, the uterus contracts firmly and drives the blood suddenly from the uterine sinuses into the abdominal veins, which expand to receive it until the heart can adapt itself to the altered condition of the circulation.

2. We must now shortly consider the main effects of the various heart lesions on the circulation. Mitral stenosis, by preventing the ready passage of the blood from the left auricle into the ventricle, causes engorgement and dilatation of the former; this raises the pressure in the pulmonary veins, and so causes edema and congestion of the lungs; the backward pressure reacts further on the right side of the heart, and causes dilatation of the auricle and ventricle, so that the systemic veins which open into the right auricle become overdistended and engorged. At the same time the left ventricle receives less than its proper quantity of blood, and in consequence atrophies to some extent. Here, then, the most important results are engorgement and overdistension of the systemic and pulmonary veins, and this condition of affairs, coming on very early in the disease, becomes more marked as it progresses.

Mitral regurgitation produces the same sequence of events, due in this case to the blood being forced back on the lungs by the incompetence of the mitral valves; the results, however, do not appear so early in the disease as in the former case, but eventually become equally marked. The left ventricle, however, tends rather to hypertrophy than to atrophy.

Aortic lesions, on the other hand, produce diminished forward rather than increased backward pressure, but sooner or later they come to produce this latter effect also; here too the left ventricle hypertrophies.

We see, therefore, that all heart lesions come eventually to cause venous engorgement, but that, while mitral stenosis produces it at once, mitral incompetence does not produce it until the disease has been in existence for a rather longer period, and aortic lesions do not produce it until they have been in existence for a considerable time, and have come to produce increased backward rather than diminished forward pressure, which is their primary effect.

3. We have now to show how it is that pulmonary and systemic venous engorgement produce such dire results in pregnancy and labor. We have seen that pregnancy throws an extra strain upon the heart. If, however, this organ is already weakened by disease, it is unable to

withstand this strain, and its action becomes more embarrassed; hence all forms of heart disease are dangerous; but if the disease is not far advanced, the heart may by suitable treatment be brought to perform the work required of it. In mitral stenosis, however, we have seen that the left ventricle tends to atrophy, while its muscular fibers also degenerate, and hence this disease is especially dangerous, more especially as it is now a well-recognized fact that in this lesion, owing probably to the above mentioned degeneration, the heart does not react at all readily to cardiac tonics, such as strophanthus, digitalis, etc. In mitral incompetence and aortic diseases there is already more or less hypertrophy of the left ventricle, according to the extent to which the disease has advanced, and hence the question as to whether the heart can undertake the extra strain thrown upon it by the increased peripheral resistance depends entirely upon the extent to which the disease has advanced.

Abortion is very likely to occur as a result probably of venous engorgement and consequent defective placental circulation, and hence it may occur in any of the heart lesions where this condition of affairs exists.

If labor comes on, during the first stage the heart is very apt to fail owing to the exhaustion of the patient, and its occurrence depends entirely upon the amount of reserve energy left in the organ; that is, on the extent to which the disease has advanced. The defective action of the heart, moreover, tends to increase the venous engorgement which already exists, and hence pulmonary embarrassment is very much increased.

During the second stage of labor the bearing-down pains tend naturally to cause the venous engorgement and to embarrass the heart's action. These effects are normally of trifling importance, but when they already exist as a result of heart disease they become a great element of danger, and the heart often fails from engorgement of its right side and inability to drive the blood through the pulmonary circulation. Here, then, the great source of danger is the venous engorgement which is superadded to that normally produced by the bearing-down pains.

When the placenta is born, we have seen that the blood from the uterine sinuses is suddenly thrown into the abdominal veins, which expand, and so prevent the right side of the heart from becoming overdistended. If, however, the abdominal veins are already overdistended, they can no longer expand further, and hence the extra blood is thrown into the right auricle, which becomes still further distended and paralyzed.

We see, therefore, that the great danger in heart disease during pregnancy and labor is due to venous engorgement; and since this engorgement occurs in all heart lesions, therefore the danger is present in them all. We have seen, however, that mitral stenosis, when slight, produces this condition, while mitral incompetence must be more marked, and aortic disease even more so than mitral incompetence before it appears; in other words, while all the various heart lesions produce the condition, its appearance depends upon the extent to which each one has advanced, so that we may say that the danger in heart disease depends rather upon the *extent* of the lesion than upon its *nature*.

No mention has been made of certain other accidents which may occur during pregnancy in heart disease, viz., the growth of fresh vegetations or the supervention of ulcerative endocarditis, since these may occur equally in all the lesions, and do not concern the point which I wish to bring out to-night; neither have I considered those cases where death occurs later on during the puerperium from pulmonary complications, since these belong to an entirely different category.

A few words may be said as to the treatment of these cases, and in the first place as to the use of cardiac tonics. These should be avoided as long as possible, and never be used until there are evident signs of failure of compensation. Before this appears, careful diet, moderate exercise, and the use of iron and arsenic are all that are required. As soon as compensation threatens to fail, cardiac tonics act well, as a rule (except in certain cases of mitral stenosis, where they often have no effect). The best of them is, perhaps, *strophanthus* in small doses (for example, $\text{M}2\frac{1}{2}$ of the tincture every four hours). It must be remembered, however, that prolonged use of these drugs after compensation has been restored tends to do serious harm, since the hypertrophy of the heart which they produce is followed by degeneration of its muscular fibers. The dose may be increased, if necessary, and then gradually diminished again until, eventually it may perhaps be discontinued altogether for a time. *Strophanthus* is especially useful where there is continued vomiting due to gastric congestion, and its own tendency to produce sickness may be counteracted by giving it with tr. cardamom co. If the venous congestion becomes very marked during pregnancy or labor, bleeding may in some cases give relief, at any rate for a sufficient time to enable the labor to be completed, and so allow the heart to again regain its power. Nitrite of amyl might perhaps be of use here, just as it was found useful by Dr. Fraser

Wright during the third stage of labor. Since the bearing-down pains tend to increase the venous engorgement, chloroform should be given as soon as ever they appear, and the second stage of labor should be reduced to the shortest possible time. The administration of chloroform should be continued until after the placenta has been delivered.

When Dr. Wright brought under the notice of the Society the case where he used nitrite of amyl in the syncope which followed the delivery of the placenta, some difficulty was found in understanding how it could relieve the engorgement of the heart. The following explanation seems to me, however, to be a reasonable one: The sudden delivery of the placenta causes, as we have seen, an extra amount of blood to be thrown into the right side of the heart, since the abdominal veins are already overdistended. Nitrite of amyl dilates the arterioles and lowers the blood pressure, so that more blood would tend to pass into the systemic veins, and thus engorge the right side of the heart still further. The veins, however, are already overdistended, so that no more blood can enter them, and hence no harm can be done thus by the drug; but at the same time the nitrite of amyl dilates the *pulmonary* arterioles as well as those of the systemic circulation, and hence the flow of blood through the pulmonary vessels is made easier, and the right side of the heart can empty itself, and gets relief. Hence we see that the important action of the nitrite of amyl in these cases is upon the pulmonary and not upon the systemic arterioles.—*Dr. G. O. C. Mackness, Edin. Medical Journal.*

CURE OF THE OPIUM HABIT AFTER TWENTY YEARS' ADDICTION.—At the last meeting of the Société Médicale de l'Ely-sée, Dr. Oscar Jennings showed a patient cured of the opium habit after an addiction of nearly twenty years. The gentleman in question was a member of the medical profession, and had repeatedly failed in his attempts at self-cure at the critical moment. The suppression of the drug had been effected in three weeks, and ten days had elapsed since the last dose was taken. The patient stated that he was still suffering from prostration and from intermittent pain, but he felt none of that horrible craving for opium that compelled to the use of that stimulant. The treatment was that always adopted by Dr. Jennings, the chief remedies employed being heart tonics and trinitrine in the form of the compound tabloids, galvanization of the brain; hot-water and hot-air baths had also been used, together with other occasional prescriptions.—*London Lancet.*

CASE OF DISEASE OF THE HIP-JOINT, FOLLOWED BY DISLOCATION ON TO THE DORSUM OF THE ILIUM. OPERATION FOR REDUCTION OF THE DISLOCATION, FOLLOWED BY EXCISION OF THE HEAD OF THE FEMUR.—M. B., a girl aged twelve, from Linlithgow, was admitted to my wards on the 25th of September, 1889. The history given was that she had pulled the shafts of a cart over on her the day before. She complained of pain in the right hip and knee. She presented the appearances most typically of dislocation of the right hip on to the dorsum ilii. There were no evidences of any recent injury, but the girl was remarkably hysterical, and had evidently got a severe fright. As I was absent from town, Mr. Caird examined the girl, and came to the conclusion that the dislocation was not recent, and was probably due to disease of joint. In a few days the patient was able to get up and to walk a little, with the toes of the right foot touching the ground. It was then learned that she had received an injury, supposed to have been a fall on the knee, more than a year before, and had been lame and unable to put the whole foot to the ground ever since.

When I resumed the charge of my wards, a few days after the patient's admission, I found the girl able to go about, but very lame, and with well-marked signs of dislocation of the right hip on the dorsum ilii. The previous history being very uncertain, as obtained from the child herself, and also from the friends through the doctor in the country, I was uncertain as to whether there had been disease antecedent to the first injury. As to the dislocation being of old standing I had no doubt. With the consent of the parents I decided to cut down on the head of the femur, remove it if it was diseased—return it to the acetabulum, if possible, if it was healthy; and in either case to do my best to obtain a straight limb for my patient. Accordingly, on the 25th October, one month after the patient's admission, assisted by Mr. Caird, I cut down on the head of the femur where it lay on the dorsum of the ilium. We found no evidence whatever of recent injury. The neck of the femur was surrounded by dense muscular and fibrous adhesions. When these were cut through, with some difficulty, we found the head of the femur apparently perfectly healthy, but without a scrap of ligamentum teres attached to it. On examining the acetabulum it was felt to be filled with what we took to be granulation tissue. It was not scraped. This, I now think, was a mistake. With a little gentle manipulation the head of the femur slipped into the acetabulum. The girl's legs were then brought together and seen to be of the same length. The wound was irrigated, and stitched up with a rubber drain-

age-tube at the most dependent part, and continuous extension applied to the limb.

Most unfortunately the wound suppurated. The child did fairly well, except that a sinus remained where the drainage-tube had been placed. This sinus was found two months after the operation to lead to carious bone. The old incision was therefore opened up on 26th December, and the head of the femur removed in a carious condition. By the 27th March, 1890, the wound was quite healed, the patient wearing a Thomas' hip-splint when up. On careful measurement the right leg is found to be half an inch shorter than the left, and the trochanter half an inch higher up and slightly more anterior on the right side than on the left side. The natal fold is well marked on both sides. The right limb is almost as well nourished as the left. There is some power of movement of the right hip.

Remarks. 1. From the condition of matters found at the operation, the absence of all signs of recent injury, and the dense adhesions that existed, amounting to a new capsule for the head of the femur, I am certain that the dislocation was of old standing, and had occurred probably at the time of the first injury, more than a year before admission. This is confirmed by the statements of the parents, that the girl had walked on the toes of the right foot ever since that time.

2. From the absence of all trace of the ligamentum teres, the presence of granulation tissue in the acetabulum, and the immediate occurrence of carious disease in the head of the femur on its return to the acetabulum, I consider that disease of the hip-joint (acetabulum) preceded dislocation and tended to make the production of this injury, which is so uncommon in children, more easy. I was prepared to find this result, for Dr. Henry Alexis Thomson had drawn my attention to the cases published by König, who says: "Dislocation in tubercular disease of the hip usually depends on osseous coxitis, especially of the acetabulum. It occurs under slight injury, and the femoral head travels in the same directions as in traumatic dislocations. A blow on the knee or the weight of the bed-clothes may be sufficient. In most of my cases the acetabulum had become partly filled up with tubercular granulations. The ligamentum teres is always destroyed" (from notes by Dr. H. A. T.). König's treatment of such cases is to excise the head of the femur, even though it may seem to be quite healthy. He has published three cases similar to mine, in two of which the head of the femur seemed to be healthy, and in all the acetabulum was diseased.—*Mr. A. G. Miller, Edinburgh Medical Journal.*

BACTERIOLOGY OF TYPHOID SUPPURATIONS.

A large majority of authors deny any pyogenic properties of the typhoid bacillus, and ascribe the complications to a "mixed infection" of the patient's system with the specific microbe of enteric fever, and various pyogenic bacteria. Of late, however, a series of cases was reported (by Fraenkel, Kocher, Favel, Weichselbaum, Roux, Vinay, Valentini, and Ebermaier) in which a most careful bacterioscopic examination of typhoid abscess failed to reveal the presence of any microbes beyond the typhoid rods. The question naturally arising, "whether the specific typhoid microbe can give rise to suppurative inflammation or not," Dr. Orloff has undertaken a very extensive course of inoculation experiments on rabbits and dogs, which enables him to lay down the following propositions:

1. Injections of "pure cultures" of the typhoid micro-organism into tissues give rise to local inflammation, with round cellular infiltration.

2. When injected into joints, the microbes cause the appearance of a sero-purulent, frequently thick, mucoid effusion.

3. When introduced under the periosteum or into muscles, the bacilli produce round cellular infiltration (chiefly in interstitial connective tissue), followed by partial sloughing, with disintegration or (more rarely) suppuration.

4. A similar infiltration is also observed after injections of the cultures into the testicle, fractured bones, and inflamed subcutaneous cellular tissue.

5. A subcutaneous injection of the bacilli (in dogs) brings about the development of abscess.

6. The injection into a healthy pleural cavity gives negative results.

7. Injections of sterilized (dead) cultures of the typhoid rods are followed by the same morbid phenomena as described *sub* $\frac{1}{3}$, though in a less intense degree.

8. The fact justifies the supposition that phlogogenic and pyogenic properties of the microbes are dependent—at least to a considerable extent—upon some chemical substances (such as Brieger's typhotoxin) developing in the cultures in connection with their vital process.

9. In such cases of suppuration complicating or following enteric fever, where the pus proves to contain the typhoid bacilli alone, the morbid process (suppuration) must be attributed to the latter, and not to Brieger's "mixed infection" (*vide supra*).

10. In mixed cultures, the typhoid microbe does not appear to produce any influence on the vitality of the staphylococcus pyogenes aureus.—*Provincial Medical Journal*.

TREATMENT OF CONSUMPTION.—It is reported that Dr. W. H. Burt, of Chicago, has recently proposed hyper-alimentation and the drinking of very large quantities of water as a cure for consumption. Eight months ago, when reading of the change brought about in the obesity of Prince Bismarck through refraining from the use of water and carbo-hydrates, it occurred to Dr. Burt that an opposite treatment ought to result in the cure of all wasting diseases. He now states his belief that excessive eating and the excessive use of water will cure fifty per cent of all consumptive cases in their first and second stages. He explained at length the tonic influence and power in building up tissue possessed by water, which forms three fourths of the human body, and said that even in health six pints a day were necessary to meet the water waste, and in disease twelve pints.

At a recent meeting of the Chicago Medical Society he is said in the daily papers to have pronounced the bacteria theory, so popular of late, to be pure nonsense. The treatment he proposed consisted in the free use of water every hour in the day, nine hours' sleep regularly, and, if possible, the sea or mountain air. Above all, the patient must look upon the drinking of water as his life. Regarding heredity as the great danger, Dr. Burt advocated the passing by Congress of a law forbidding the marriage of consumptives. With this in force, one hundred years from now, he thought, consumption would not exist in the United States.

OPERATION FOR HABITUAL DISLOCATION AT THE SHOULDER-JOINT.—At the meeting of the Berlin Medical Society, July 2, 1890, Prof. Max Schüller showed a boy, fourteen years old, on whom he had performed, four years ago, an excision of the ankle-joint for an acute suppuration of the joint after an acute osteo-myelitis of the tibia. The excision was subperiosteal, according to Von Langenbeck's approved method. The shape of the new joint is now quite normal, so that it is of some difficulty at first sight to say which is the operated joint. Besides, the usefulness of the joint is so complete that the boy can run, jump, climb, and share in all sports and gymnastics as well as his fellows.

Dr. Schüller finally showed a good specimen of habitual dislocation of the shoulder-joint, which he treated by excision of the joint. The patient was a young woman who for fourteen years had had innumerable dislocations, and at last could not use the arm for pains. Schüller found on the posterior part of the head of the humerus a depression made, he believes, by the pressure of the head on the inner border of the glenoid cavity, where it lay seemingly all the

time. The glenoid cavity was eroded on its inner border, and on the lower part it was irregularly sharpened as if it had been broken sometime before. Schüller supposes, according also to his experimental studies (Schüller's Surgical Anatomy, I, § 94), that in his case a fracture of the rim of the glenoid cavity was the first cause of the recurring dislocation. This fracture can have this effect then, if the patient, after the reposition, is allowed to use the arm before the fracture is healed. A fracture of the head and of the tubercula could not be found, and the scapular muscles were intact, as now, after healing of the excision, faradization induces rotation of the humerus.—*Med. and Surg. Rep.*

INFLAMMATORY LEUCOCYTOSIS.—Von Limbeck's investigations, brought forward at the Heidelberg Congress last year, have shown that the white corpuscles of the blood, physiologically increased in number during digestion, are considerably increased in number in all acute diseases which are accompanied by coagulating exudations—for example, lobar pneumonia and suppurative peritonitis. This increase does not occur in the infectious diseases which give rise to no exudations into the tissues—for example, typhoid fever, intermittent fever, septic fever—even if the temperature rises very high. The danger of this inflammatory leucocytosis is mostly proportioned to the degree of exudation and its richness in cells; it declines critically with defervescence; it does not occur with stationary exudations, and it is not diagnostically, but prognostically, a valuable criterion. In a discussion on this subject at Prague (*Verein deutscher Aerzte*), Von Jacksch confirmed the statements of Von Limbeck as regards typhoid and lobar pneumonia in children, the proportion of white to red corpuscles being 1:40 to 75. In the latter disease the hemoglobin amount was also distinctly lessened. (*Berliner klin. Wochenschrift*, No. 51, 1889).—*British Medical Journal*.

CAN JAUNDICE BE INFECTIOUS?—Epidemic jaundice has been attributed to a variety of causes. It has been shown to be associated with enteric and malarious fevers; to have resulted from sanitary defects, from arsenical poisoning, and from climatic influences. As to uncomplicated jaundice ever being truly contagious, there does not appear to be much evidence. But, as catarrh in other forms may be communicable, there would seem to be no reason for denying the communicability of catarrhal jaundice. The following group of cases strongly suggests its occasional infectiveness. H. E., aged nine years and a half, got a chill

from "paddling" in the sea last summer. A laryngeal catarrh resulted, which was followed by an attack of catarrhal jaundice. Three weeks later his two sisters, aged eleven and six years, had similar attacks; while two brothers, aged seven and four, succumbed a week afterward. A younger child of three years and a half escaped. All these children's cases were well-marked instances of catarrhal jaundice, and in none of them (except the first, who "paddled") was there any explanation of the illness to fall back upon except infection.—*Dr. Thomas F. Raven, London Lancet*.

SALOL IN THE GASTRO-INTESTINAL DERANGEMENTS OF CHILDREN.—Salol is an easily administered, safe drug in the first stage of gastro-enteritis in children, and in more chronic forms of entero-colitis, accompanied by slimy, bad-smelling evacuations. In the acute condition it is necessary to keep the stomach at rest and administer two or three doses of salol within five or six hours. For the more chronic state of catarrh it is best given in somewhat larger doses before meals. In frequent serous discharges and in colitis the salol does not produce the same good results as in the case mentioned above, and its effect is uncertain, not being so rapid or so sure as an opiate.

In dysenteric disorders it can not be relied on. It seems, then, that salol acts best in morbid conditions due to fermentation and decomposition in the stomach and upper bowel, and that it diminishes in power as it passes through the large intestine.—*Walter Lester Carr, M. D., Arch. of Pediatrics*.

TREATMENT OF STRANGULATED HERNIA.—My experience agrees with that of Mr Robert Marriott, in regard to the value of the ice-bag in the treatment of strangulated hernia. I first observed it in a case under the care of Mr. Marshall in the wards of University College Hospital many years ago—a case of femoral hernia, with strangulation, where all treatment was ineffective until it was applied. In several private cases since that time I have applied it with success; and in the last case of the kind, after every other means had failed, I left the ice-bag on while preparing to operate, and on returning to the patient found that reduction had taken place. I was surprised to see it condemned as useless by so high an authority as Mr. Heath, and, as it is a matter of importance, it would be interesting to know what is the experience of others. It appears to act by causing a contraction of the bloodvessels, whereby the size of the tumor is diminished. In a case of long duration, with impaired vitality and contractility of the tissues, I can conceive

that it might do harm by increasing the danger of gangrene, though even here it is possible that the application of a cold approaching that of freezing suspends rather than destroys vital changes. In any case, I should say that if good does not result from the application of the ice-bag for from one to two hours (according to the size of the hernia), it is useless to continue it.—*Dr. Chas. A. Rayne, London Lancet.*

DIABETES IN CHILDREN.—Dr. Stern, of Berlin, has collected one hundred and seventeen cases of diabetes in children, and thinks that this affection is by no means so rare in childhood as is frequently supposed. The girls in his list are more numerous than the boys, the proportion being five to three. No age would appear to be free. Six of the cases occurred in infants under a year old. The parents of the affected children were in some cases themselves diabetic, but in many more instances they were suffering from some neurotic trouble. The disease in many cases seemed to have come on after gastric catarrh, purpura, measles, or concussion of the brain. As to the prognosis, he finds that three fourths of the cases were fatal, as was every case in which the affection had lasted for a year or more. The disease did not appear to run a more rapid course in younger than in older children. *Ibid.*

HYDRAMNION IN TWIN PREGNANCY.—Dr. Kruse, of Greifswald, described in the *Deutsche Med. Wochenschrift*, No. 5, 1890, a case where this interesting condition occurred in single-arm twin pregnancy. The patient was aged forty-one, and had borne seven children. After a fall the abdomen suddenly increased in size, and dyspnea set in. When she was admitted to hospital, twin pregnancy at the sixth month, with hydramnion of one fetus, was diagnosed. An elastic catheter was introduced in order to induce labor, but without effect. The membranes were ruptured, and the twins were then rapidly expelled. Seven quarts of liquor amnii came away. The twins and membranes were carefully examined. None of the conditions alleged by some authorities to be the cause of hydramnion in single ovum twin pregnancy were present. One fetus was smaller than its brother, but there was no anemia of the one with corresponding plethora of the other. The placental circulation was perfect throughout the placenta and cords. The bladder of the bigger fetus was greatly distended with urine, the ureters tortuous, and the renal pelvis dilated. This condition was attributed by Dr. Kruse to a mechanical impediment to the escape of urine. That impediment was, in his opinion,

the pressure of the amniotic fluid, for there was no obstruction of any kind in the genito-urinary tract itself. The hydramnion was thus not caused by polyuria in the fetus. The smaller size of one fetus Dr. Kruse attributed to the fact that it received blood from a less extensive surface of placenta than in the case of its brother. In short, the cause of the hydramnion could not be determined.—*British Medical Journal.*

THE DIAGNOSTIC AND PROGNOSTIC VALUE OF UROBILINURIA.—Hayem (*Gaz. Hebdomadaire*, xxxvi) claims the same diagnostic value for urinalysis in diseases of the liver as in diseases of the kidney. While in the latter case we are on the look-out for albuminuric acid, etc., in the other the coloring matters are the ones to be considered. As no urobilin is found in the urine of healthy animals, Hayem concludes that urobilinuria always means a disturbance of the liver. That the condition is so frequently found is due to improper diet and the use of alcohol. The degree of urobilinuria is an index of the gravity of the liver changes. While with light drinkers the quantity of urobilin is small and may completely disappear from the urine, in those of persistent free urobilinuria, with a history of alcoholic excesses, we certainly have to do with a cirrhotic liver. The importance of this symptom is apparent when we think that it occurs early, long before other signs appear.

INFLAMMATION OF COWPER'S DUCT.—This disease of the vulva is of considerable importance. It is a painful affection, and its causation is not absolutely established. Dr. Matthews Duncan holds that abscess of Cowper's gland and cystic dilatation of its duct are well-defined diseases; suppuration of the duct and cystic degeneration of the gland being, on the other hand, quite rare. Dr. Pollacsek, of Budapesth, has published some researches on the subject, which will be found in the *Centralblatt für Gynäkologie*, No. 22, 1890. He believes that inflammation of the gland is, as a rule, the result of injury, and is not of gonorrheal origin, excepting when the duct is involved or when the duct alone is inflamed. Dr. Pollacsek distinguishes four varieties of "Bartholinitis." The first is simple catarrh of the duct; suppuration may occur, but the inflammation is not specific, and no gonococci are to be found. In gonorrheal catarrh of the duct, the second variety, the gland is rarely involved, and in exceptional cases but slightly swollen. Suppuration is rare, but this variety—frequent in prostitutes—is very chronic and intractable. The third variety is idiopathic

suppuration of the gland. It is very acute and may occur in children; the staphylococcus pyogenes aureus is found in the pus. Lastly comes gonorrhea of the duct with abscess of the gland. This form is the result of mixed infection from the gonococcus and staphylococcus. It is significant that the duct often remains diseased for months or even weeks after the opening of the abscess in the gland. The abscess cavity is in many cases difficult to close, and its duct may ultimately become a fistulous tract. Some authorities believe that cysts of the duct represent degeneration of that canal through one of the above forms of inflammation.—*British Medical Journal*

ENTERIC FEVER AND THE POLLUTION OF RIVERS.—A remarkable instance of the danger of drinking river-water which receives the unpurified sewage of towns has, we understand, lately come under the notice of the local government board. Mr. Jacob, the well-known medical officer of health for the Guildford rural and urban sanitary district of Surrey, reports that on or about June 16th, fifteen persons employed at a paper mill on the banks of the river Wey, nearly a mile below Godalming, fell ill with enteric fever. That for several months previously the district of Farncombe, in which thirteen out of the fifteen persons attacked lived, had been entirely free from enteric fever. That it is only among persons working at the mill that cases of enteric fever have occurred. That on inquiry at the mill as to the circumstances common to the persons attacked, he found that up till June 2d—that is, fourteen days before the bulk of the cases occurred—the water supply was, as usual, from a well which was not suspected of contamination. That on that date, in consequence of alterations which were in progress, the usual supply of water could not be pumped into the tanks from which the factory hands helped themselves when thirsty, but that on June 2d, and for three or four days after, river-water was pumped into the tanks and was at hand for the use of the employees. Enteric fever was known to have occurred in Godalming during April and May; consequently the river-water into which the excrements and foul water of that town are discharged was contaminated at the time and at the point from which this polluted water was drawn for drinking purposes. The persons attacked with the fever habitually took the water supplied on the premises, and there can be but little doubt as to how their illness was caused. Mr. Jacob has made a careful inquiry locally, so far as his opportunities allow, but we understand that two of the fifteen cases have occurred in the

sanitary district of Godalming Borough, and that with regard to these he is not in a position to give the information required. This seems to be a reason for the central authority at once undertaking an inquiry into all the facts of this outbreak, the full particulars of which should, on public grounds, be made widely known.—*Ibid.*

BRAIN GRAFTING.—A very curious and apparently quite novel observation has been made by Dr. Gilman Thompson, of New York. Two large dogs, A. and B., were simultaneously trephined over the right occipital region; eight cubic centimeters of brain tissue were excised in one piece and exchanged; the piece from dog A. was put into the opening in the brain of dog B., and *vice versa*. On the third day both dogs were killed, and the transplanted pieces of brain tissue looked normal, and in each case they were so adherent and firmly covered with fibrous exudation that it was impossible to pull them off with forceps without laceration. Total blindness of the eye opposite the lesion resulted in each dog, as was expected. In another case, 1.5 cubic centimeter of brain was removed from the occipital region of a cat and transferred to a corresponding position in the brain of a large dog, which was killed at the end of seven weeks, when the piece of transplanted cat's brain was found firmly adherent to the dog's brain, with the pia mater intact. Careful microscopical examination was made, and it was found that there was complete union, through organized connective tissue, of the contiguous portions of the two brains. There was descending secondary degeneration of the dog's brain on the side of the graft, as is usual in cases of simple excision of brain cortex; hence the cat's cortex had not succeeded in acting as a nutrient center for the dog's brain.—*Ibid.*

THE PREVENTION OF COCAINE POISONING. Every now and then alarming symptoms, especially in neurotic patients, follow the application of cocaine, particularly in the treatment of disease of the nose and throat. Dr. I. Gluck, of Omaha, in the New York Medical Record, states that the risk of such undesired consequences is very much diminished if the solution of cocaine be prepared with phenol. He directs two drops of phenol to be dissolved by agitation in a dram of distilled water, and ten grains hydrochlorate of cocaine added; this mixture can be kept indefinitely without any impairment of its qualities, and can be diluted when required, if necessary. Dr. Gluck claims that this addition of phenol not only prevents toxic effects, but increases the anesthetic action.

The American Practitioner and News

"NEC TENUI PENNÆ."

Vol. X. SATURDAY, AUGUST 16, 1890. No. 4

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H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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THE INTERNATIONAL MEDICAL CONGRESS AT BERLIN.

Since our last issue the Tenth International Medical Congress has been.

In point of numbers the meeting seems to have been a decided success; no less than eight thousand medical men being reported as present. The American delegation alone numbers seven or eight hundred.

Of the success of the meeting as a scientific gathering little can be said until a fuller record of its transactions has appeared. But, from the limited reports so far received, no very important contributions have been made to the world's fund of medical knowledge. Nor indeed is it to be expected that any valuable scientific discoveries would be reserved for the meeting of the Congress. The greatest help the International Congress can be to science is in the way of simplifying nomenclature and the classification of disease. All the rest can be attended to by the scientific medical journals.

Undoubtedly the prospect of cutting a figure among such a multitude as is now accustomed to attend these Congresses is a great stimulus to many who, without such opportunity, would be content with smaller attainments than they now aspire to. Besides, these colossal gatherings offer opportunities to the profession in general

of meeting with illustrious lights in the profession which otherwise could never be gained. It is therefore perhaps not to be complained of that little fellows should jump at the chance thus afforded to push themselves forward, and take the up valuable time and ill-afforded attention which the great must by courtesy give them. Every man naturally feels that life must be made in some way a success, and if this can be done only by forcing himself on the attention of the public at Congresses, State Associations, and the like, why should he be prevented from lifting himself from an oblivion that he alone recognizes as unmerited?

These Congresses have already become too large for any practicable usefulness to science, and in the near future Congresses within the proper meaning of the term must be devised for the accomplishment of the important ends to be gained by such assemblages.

THE LOUISVILLE SURGICAL SOCIETY.

On the evening of the 25th ult. this vigorous Society celebrated the third anniversary of its being. The officers elected for the ensuing year are: President, Dr. D. W. Yandell; Vice-President, Dr. E. R. Palmer; Secretary, Dr. A. M. Cartledge.

In consequence of the illness of the President, the usual retrospective address had to be omitted, but the regular scientific proceedings (which appear elsewhere in this issue) were evolved with wonted zest.

In the elevation of the former secretary to the office of Vice-President, our journal loses a very regular contributor to one of its departments; but his successor will doubtless see that the interesting proceedings of the Society, which have appeared with unfailing regularity since the day of its first meeting, are still laid before our readers.

At the close of the meeting the members, with several invited guests, sat down to a collation given by Dr. Turner Anderson, the genial host.

SINCE 1866 the University of France has conferred the degree of M.D. on thirty-five women.

Notes and Queries.

FRENCH POPULATION STATISTICS.—The last French census showed that the population of France consisted of 37,930,759 souls. A contemporary has analyzed the figures supplied by the census returns as to occupations, and from its report it is found that the number of persons depending on agriculture was 17,698,402; on industrial pursuits, 9,289,206; trade, 4,247,764; liberal professions, 1,094,233; transport service, 1,020,721; public administration, 711,027; public forces, 613,362; independent persons, 2,295,966; giving a total for the classified population of 36,970,681. The difference is made up by 490,374 persons not classed, 237,899 persons without professions, and 231,805 persons with unknown professions. The mean proportion of the agricultural classes to the total population is 48 per cent for the whole of France, but it varies from 83.6 per cent in the Department of the Lozère to 2.3 per cent in that of the Seine. The proportion of the agricultural population is much larger in the center and west of France than in the north and east. The agricultural and industrial classes in France absorb together three-fourths of her total population, and they are distributed in inverse ratio to each other. The mean proportion of the industrial population of France is 25 per cent, but it is not found in any department, the nearest proportions being 12 and 26 per cent. The average extent of the French trading classes is 11.5 per cent of the the total population. The following departments are essentially commercial: Seine, 27.5 per cent; Bouches-du-Rhône, 25 per cent; Rhône, 22 per cent; Alpes-Maritimes and Isère, 19 per cent; Gard and Seine-Intérieure, 17 per cent; Hérault, Nord, and Seine-et-Oise, 16 per cent. The proportion of the liberal professions to the total population of France varies but little in the several departments. Its mean is about 5 per cent of the population. Finally, as to the class of the population described as independent, its mean proportion over the whole of France is 11.5 per cent. We find the highest percentages in the following departments: Seine-et-Oise, 22.3 per cent; Haute-Garonne,

15 per cent; Seine, 12 per cent; Seine-et-Marne, 11 per cent. The lowest mean (from 1 to 3 per cent) of persons living on their property is found in the Auvergne, Alps, Savoy, and Brittany.

AN ORIGINAL EMERGENCY OBSTETRIC FORCEPS.—At the recent Nashville Convention many stories were told by those in attendance, while comparing notes concerning professional experiences. One practitioner, Dr. W. C. Blackman, of Davidson County, Tenn., related his experiences in two obstetric cases. In both instances he decided that immediate delivery was necessary. The natural forces had given out. He had no forceps with him; no neighbors to call on for assistance, and he was miles from home. Fortunately in both houses there happened to be pairs of shoemaker's pincers with stout, curved handles. The latter were slipped over the heads of the children, and by pulling against the pivoted lock successful extraction was made. Both mothers and both children made perfect recoveries. One of the latter had a scar just at the edge of the hair, but the growth of the latter (the child being a girl) soon covered it up. This girl grew up into blooming womanhood and was married the week before the convention met.—*Medical Record.*

[Great Heavens! we would like to see the pincers.]

POISONOUS EFFECTS OF EXALGINE.—A. B., aged about forty, a lady of hysterical temperament, has suffered from nervous headache monthly for the last ten or more years, and has been treated with all kinds of drugs, but without avail. Latterly I have been administering exalgine, commencing with two grains twice a day, which gave great relief. The attack, however, recurred the next month, and two grains every four hours had very little effect, so I increased the dose to five grains twice a day. The first dose was taken at 10 p. m., after supper, with great relief to the pain, and the patient slept till 6 a. m., when she awoke and felt headache coming on again, so took another dose and lay down. In about a quarter of an hour she jumped up with a sud-

den start and a scream, and thought she was dying; she had such curious sensations, felt numb all over, fingers and toes tingled and felt dead; eyelids twitched continuously; the whole head felt as if it were swelled, and kept expanding and contracting alternately. There was great oppression in the region of the diaphragm. In a few minutes the patient vomited and ejected the remains of the medicine. She then felt much relieved, and lay down and slept after taking a little tea. Two hours after the patient got up, but felt ill; the headache was slighter, but not gone; the numbness of the fingers and toes remained nearly all day, but beyond this the patient was little the worse for her experience. She went out the next day, but says she will be afraid to try the medicine again. I think that this so-called poisoning with exalgine is due to being taken on an empty stomach, as the former dose was well borne when food was present, so I always order it to be taken after a meal. I give the drug dissolved in tinctura aurantii and diluted. I have found it useful in toothache, facial neuralgia, and in case of long-standing lumbago. No beneficial effect of the drug have I found in less than two grains for an adult.—*British Medical Journal*.

DELIVERY OF THE MORIBUND OR POST-MORTEM CESAREAN SECTION.—This is one of the most serious ethical questions in relation to obstetrics. Dr. Barton C. Hirst, Professor of Obstetrics in the University of Pennsylvania, has recorded a case of artificial delivery of a child when the mother was dying. This step was undertaken in preference to cesarean section after death. The woman was pulseless and unconscious; the fetal heart could be distinctly heard, and the child's movements were active. Full arrangements had been made for abdominal section immediately upon the death of the mother. Dr. Hirst dwelt upon the child's good condition at the time, and the possibility that as the mother might live for some hours, it might die, from various causes, first. He therefore advised the resident physician at the hospital where the case occurred to dilate the cervix, turn and deliver. This was done, the child being extracted in less than five min-

utes. It was born alive and cried vigorously. A week later it died of some condition quite unconnected with the circumstances of its birth. The woman's death was certainly not hastened by the operation; in fact she seemed a trifle better after delivery. At the necropsy it was found that death was due to meningitis. Dr. Hirst preferred this proceeding to a "disfiguring and bloody operation which would horrify the friends of the dead patient." On the other hand, version and extraction were as quickly performed as section, the child was rescued while in good condition, there was nothing repulsive about the operation to the bystanders, and the mother's death was by no means necessarily hastened.—*Ibid*.

EXPERIMENTAL RABIES.—Drs. Vestea and Zagari, who have for years been investigating the action of the virus of artificial rabies in the laboratory of Cantani, in Naples, have recently published the results of some experiments in support of the theory that this virus has a peculiar affinity for the nerves, and that it seems to travel to the spinal cord and medulla by the route of the nerves rather than by that of the veins of lymph channels. These experiments are described in *Fortschritte der Medicin*, Bd. vii, and are summarized in the *Centralblatt für Chirurgie*, June 28, 1890. The results are very curious in certain respects, as they showed that when the virus was applied to a small nerve filament far from the central system it was as sure to act as when an inoculation was made in the substance of a large trunk close to the spinal cord. This seems to present a contradiction to the claim of Pasteur, that bites near the brain are more dangerous than those at the periphery because of their nearness itself.—*Medical and Surgical Reporter*.

A QUININE FACTORY IN INDIA.—The South of India Observer states that there is a probability that the Wynaad Planters will start a quinine factory of their own, for the treatment of bark grown in their district. If, by united effort, such a factory could be established, it is thought that much benefit would result to the planter in the saving of freight on a large quantity of useless material now transported.

A LONG FAST.—The daily papers of July 16th reported that a man named John Roth had died July 14th, at the county asylum, Galena, Ill., having passed his sixtieth day of total abstinence from food of any kind.

The man was said to have been attacked by progressive paralysis two months ago, which incapacitated him from work, and soon made it impossible for him to eat. After a week of fasting he was brought to the county asylum on May 23d, and there lingered fifty-three days without food.

In reply to inquiries from the Reporter as to the correctness of these statements, Dr. Hugh F. Gunn writes that they are substantially true, but that the man could take liquid or solid food if inclined to do so. He was in a state of stupor, from which he could be aroused, however, and at no time was any food administered by means of mechanical appliances. The man occasionally swallowed a little water. The account of the case rests upon the assertions of the superintendent and the nurse at the asylum. It is not as accurate and exact as might be wished, but indicates a long resistance to the effects of starvation.—*Med. and. Surg. Rep.*

LUPUS OF THE LARYNX.—A case of lupus of the larynx has recently occurred in Professor Rydygier's wards in Cracow, and an account of it is given by Dr. Langie in the *Przegląd Lekarski*. The patient was a laboring man, aged thirty-two. He had suffered from a slight cough, hoarseness, and a difficulty in breathing for a couple of years, these symptoms having increased so much during the preceding two months that he had been obliged to seek medical advice. Externally, there was nothing to be detected, except that the subclavian lymphatic glands were much enlarged. On examination with the laryngoscope a gray growth could be seen, with a rough, granular surface, extending from the base of the epiglottis into the right half of the larynx and involving the right vocal cord. On the left half of the larynx discrete tubercles of the size of a millet seed could be seen, and the rima glottidis was much narrowed. In consequence of the extreme dyspnea from which the patient was suffering laryngotomy was performed, and then, as the

growth appeared to be of a malignant character, the larynx was excised. Four months later the patient was fitted with a Bruns' artificial larynx, which proved quite satisfactory. The microscopic examination of the tumor showed it to be lupus.—*London Lancet*.

METHYLENE BLUE AS AN ANALGESIC.—The Chemist and Druggist, June 21, 1890, says: Since, with the introduction of coloring agents as antiseptics, what may be called a new step was taken, or rather, perhaps, a new source indicated for remedial agents, we may expect to soon find other substances obtained from the same class and brought forward as medicants, the value of which may exceed that of the first found. We have now to note methylene blue, which is claimed to possess analgesic properties. Those who have a great admiration for blue blood should seize the present opportunity of obtaining it cheaply, since, besides relieving them of muscular or articular rheumatic pains, it passes so rapidly into and through the circulatory system that an hour at the latest after the dose the urine is colored pale-green, then bluish-green, and after four hours a fine aristocratic deep blue.

As is always the case with remedies recommended by the discoverer, no unpleasant secondary effects were observed, even after continued use. Drs. Ehrlich and Leppmann, who investigated the medicinal properties of the substance, tried at first to administer it as a hypodermic injection, but without success, as they could not get a sufficiently strong solution.

A GREAT CHILD.—It is reported that an extraordinary child was recently found by a correspondent of the *Lancet* in West Cornwall, Great Britain. He is now five years and six months old, and is of the following dimensions: Height, four feet; weight, 117 pounds; circumference of abdomen, 42½ inches; waist, 37½ inches; chest, 37 inches; neck, 14 inches; head, 22½ inches; thigh, 23 inches; calf, 15½ inches; arm, 11¼ inches; forearm, 16½ inches. He is very healthy, eats all day long if he can get it, and is fairly intelligent. The parents and their other children are of ordinary size.

GERMAN MEDICAL DIPLOMAS.—In the numerous small free faculties of Germany the medical students pass their examinations in the following manner :

“Do you smoke?” asks the examiner.

“Yes, sir,” answers the student. “Will you have a cigar?” (Hands the professor a pfennig cabbage-leaf cigar.)

“Tell me,” says the professor, slowly lighting his weed, “what are a physician’s principal duties?”

“To collect his fees, increase his practice, and exhibit his diploma from the time-honored University of Guzzleburg,” replies the student.

“Where shall you practice?” demands the professor, “and what are your duties toward me?”

“I shall go to America among the ignorant natives and make a golden harvest, and my duty toward you, Herr Professor, is to invite you to dinner for the rest of the semester,” answers the student.

The professor smiles and says, “You are right. Let us go to a restaurant opposite and I will sign your diploma. The diplomas of the time-honored ‘University of Guzzleburg’ are admired and respected in America. I have a cousin who is a doctor in Chicago. Let me tell you how the Indians chased him on Prairie Avenue. He was wounded twice by their arrows and captured, but was released by his pursuers when they found on his person the time-honored diploma of the ‘University of Guzzleburg.’ Ah! here’s the restaurant, and I will make out your diploma from the time-honored ‘University of Guzzleburg.’”—*Lancet-Clinic*.

WHILE cross-examining Dr. Warren, a New York counsel declared that doctors ought to be able to give an opinion of a disease without making mistakes.

“They make fewer mistakes than lawyers,” responded the physician.

“That’s not so,” said the counselor; “but doctors’ mistakes are buried six feet under ground, and lawyers’ are not.”

“No,” replied Warren, “but they are sometimes hung as many feet above ground.”—*Montreal Legal News*.

INEBRIETY AND MARRIAGE.—Dr. T. D. Crothers, in an editorial in the *Quarterly Journal of Inebriety*, July, 1890, says: Public sentiment is shocked at the marriage of lunatics, and yet every day the lunatic inebriate is permitted to marry, and persons are ready to join themselves in such a contract for the purpose of curing them. In a recent murder case it appeared from the evidence that the murderer’s father was married when intoxicated, and died a few years after by suicide. The murderer was the first child, and was a low, paroxysmal drunkard, who had spent years in prison for crimes of drunken violence, and finally killed a passing stranger. In another case the courts refused to grant a woman a divorce who had recently married and found her husband an inebriate; a few months later this husband killed her in a drunken frenzy. In a certain family of entailed wealth there are living to-day, in the third generation, ten direct descendants who are feeble-minded, idiotic, and insane; all clearly traceable to the marriage of an inebriate ancestor. The failure of the law to prevent and regulate such marriages, and the delusion that inebriety is a *vice* that is under the control of the victim, is one of the great obstacles toward social and legal reform. The efforts to raise the poor and degenerate inebriate and his family are practically of no value as long as marriage with inebriates is permitted. Recently the legislature of the State of Victoria in Australia has passed a law which gives a wife the right of divorce if the husband is found to be an habitual drunkard. If after marriage she discovers that he is an inebriate she can also get a divorce. The husband can do the same with a wife if she is proven to be an inebriate. This is a clear anticipation of the higher sentiment which demands relief from the barbarous law which would hold marriage with an inebriate as fixed and permanent.

THE increase of insanity in Berlin has made it necessary that a new public lunatic asylum should be established. The building, which is to accommodate 1,000 patients, will be situated in the easterly suburb of Lichtenberg. The city of Berlin already maintains an asylum with about 1,200 inmates at Dalldorf.

TOXICITY OF RESPIRED AIR.—Professor Lehmann and Dr. Jesser have published a paper, from the Hygienic Institute of Wurzburg, dealing with the supposed poisonous properties of expired air, and more particularly with the results obtained by Brown-Séquard and D'Arsonval in their experiments published in 1888. It will be remembered that these two experimenters condensed the moisture of expired air, and got a clear alkaline fluid which reduced nitrate of silver and acted as a powerful poison to various animals, whether injected subcutaneously or inhaled by the lungs. Lehmann and Jesser have repeated these experiments, with the result that they find this condensed fluid to contain a small amount of ammonia and chlorine, and a minute proportion of organic matters which could not be estimated. No alkaloidal reaction could be obtained. The experiments on animals also failed to confirm Brown-Séquard's results. In conclusion, the the authors say that although man undoubtedly gives off during respiration traces of organic matter which may belong to the unstable alkaloïds, yet at present it is not possible to state any thing definite about their nature or poisonous properties.

T. DE WITT TALMADGE says that no one can do with less than six or seven hours' sleep per day, and warns his audience against the fairy tales of great men who slept but three or four hours a night. Americans need more sleep than they get, and the lack of it is one of the elements which render insanity and nervous diseases frequent. No man or woman ever yet kept healthy in body or mind for a number of years with less than seven hours' sleep.—*The Times and Register*.

ONE hundred and fifty men, women, and children at a church picnic at Solon, near Iowa City, were prostrated on Sunday with serious symptoms of poisoning. In a few moments the people had fallen from the tables upon the ground writhing in pain. Physicians were summoned and administered remedies. In a few hours the patients recovered, no case being fatal. The use of water from a well long abandoned is given as the cause of the sickness.

THE NUTRITIVE VALUE OF BOILED MILK.—E. T. Vassilieff performed a series of experiments on six healthy adults, aged from eighteen to twenty-three years, for the purpose of comparing the relative digestibility with raw milk. Each experiment lasted six days. During the first three days the subject took raw milk alone; during the next three days boiled milk was administered. The quantity of milk each day varied from one thousand eight hundred and fifty to four thousand two hundred cubic centimeters. The author arrived at the following conclusions:

1. The assimilation of nitrogenized substances of milk is greater if the milk is not boiled. The average quantity of non-assimilated nitrogenous substances is from 6.42 to 7.62 per cent in raw milk, and from 7.76 to 8.79 per cent in boiled milk.

2. The same rate holds good as regards the fats. In raw milk the proportion of fatty acids non-assimilated is from 2.88 to 4.85 per cent, while, on the contrary, in boiled milk we have from 4.53 to 6.99.

3. Consequently, the nutritive value of boiled milk is inferior to that of raw milk.—*Bulletin de Thérapeutique*.

IN THE OFFICE OF THE WRONG SPECIALIST. A physician whose specialty was skin diseases, one day saw a patient enter his office. "Strip off your clothes!" commanded the physician. "But, doctor!" expostulated the patient. "No buts!" exclaimed the doctor, who was quick tempered; "do as I bid you." The patient doffed his clothes and stood naked before the dermatologist, who, examining him closely, remarked: "My good sir, I can detect no affection of the skin in your case." The patient smiled and replied: "True, doctor. I came to consult you in regard to my eyes."—*Cincinnati Lancet-Clinic*.

THE American Association of Obstetricians and Gynecologists will hold its next annual meeting in Philadelphia, Tuesday, Wednesday, and Thursday, September 16, 17, and 18, 1890, under the presidency of Dr. E. E. Montgomery, of Philadelphia, and in the hall of the College of Physicians.

UNNA ON THE TREATMENT OF LEPROSY.—Unna, at Weisbaden, in April, 1885, drew attention to the treatment of leprosy by ichthyol internally, and the application externally of an ointment of resorcin, twenty per cent, or rather of resorcin muslin. Milton recently, in a pamphlet, drew attention to the cure of a case of his by the same treatment, and advises that it should be extensively used, as it is efficacious, economical, and safe. Brooke, in an account of a recent visit to Unna's clinic, states that chaulmoogra oil is useless except in large doses, which the stomach will not tolerate; the treatment employed in two cases at present under Dr. Unna's care being chrysorobin internally, with pyrogallol externally. The chrysorobin is given in a keratin-coated pill, which would not dissolve till it reached the alkaline media of the upper gut, and thus the premature oxidation as well as the undesirable local action of the chrysorobin on the stomach would be avoided; and, in order to prevent its conversion there into chrysophanic acid, it is mixed with calcium sulphide in a pill, and followed down by free doses of hydrochloric acid.

THE New York Medical Practice Law, approved June 4th, contains the following important provisions:

It reaffirms the State's right to regulate the qualifications of practitioners of medicine.

It requires a satisfactory preliminary education as a condition to matriculation.

It provides a definite and uniform standard of examinations for graduates.

It divorces medical teaching from the licensing power.

It compels three years' attendance at the medical colleges.—*Jour. Am. Med. Association.*

• ESTABLISHED physicians, encourage young doctors by telling how you yourself once took measles for scarlatina. Don't walk around with a profundity and overwhelmingness of manner, as though you were one of the eternal decrees. And if you have nothing to say that is encouraging, compress your lips, put your hand over your mouth and keep still.—*Rev. T. De Witt Talmage.*

[Oh, that Bro. T. would do likewise!]

THE glorious Fourth supplied the Boston City Hospital with twenty-one injuries from explosions, the giant cracker figuring largely in the etiology. The Boston Medical and Surgical Journal says that a feature of these injuries is the splitting open of the base of the thumb, and production of a compound dislocation at the joint of the first metacarpal and the trapezium, so that the thumb and its metacarpal are connected with the hand only by the soft parts.

AMONG the mountain resorts which are becoming quite popular this summer are the Hotel Kaaterskill, Paxinos Inn, Lake Hopatcong, and Swiftwater; the latter in Monroe County. Wernersville has several good hotels in its vicinity. No one who has not visited it would imagine that such beautiful mountain scenery is to be found within two or three hours' ride from Philadelphia.—*Times and Register.*

AN UNPROFITABLE FIELD FOR THE PATENT MEDICINE MANUFACTURER.—There is a law in Bulgaria to the effect that if a patent medicine, which is advertised to cure a certain malady, fails to do so, the vendor of the remedy is liable for damages, and may also be sent to prison for a limited period of time as a punishment for publishing an untruth to the injury of the public.

SEVERAL children were poisoned in Bridgeport, Pa., last week, by eating blackberries from bushes on which Paris green had been sprinkled to poison insects that were eating the leaves.

WHAT was said to be a genuine case of Asiatic cholera was reported from Atchison, Kansas, July 18th. The patient died within twenty-four hours. The newspapers say that two physicians pronounced the case as undoubtedly Asiatic cholera.

THE Lancet announces that the chair of Mental Pathology at the University of Berlin, made vacant by the death of Prof. Westphal, has been accepted by Dr. Grashey, of Munich.

THE infant mortality has been very high in Baltimore since the 1st of July.

DR. WILLIAM BRODIE, one of the most widely known physicians in Michigan, died July 30th, at his home in Detroit, at the age of sixty-seven years. Dr. Brodie was graduated from the College of Physicians and Surgeons of New York City in 1850. He was at one time president of the American Medical Association, and was a member of numerous medical societies.

A CAT which had been recently bitten by a supposed mad dog, in Beverly, Massachusetts, attacked and bit two little children of J. C. Edwards, and tore the hands of Charles Grenough, who killed the animal. The wounds were cauterized.

HENRY M. STANLEY will lecture in the Metropolitan Opera House, New York, for the benefit of the Fresh Air and Benevolent Home of Summit, N. J., shortly after his arrival in this country.

It is reported, under date of July 30th, that the cholera epidemic is diminishing in Valencia, Spain. From ten to fifteen cases are reported daily, of which about one half prove fatal.

TELEGRAPHIC advices from Mecca, dated July 31st, state that the cholera epidemic there shows no sign of abatement. The deaths from the disease average eighty daily.

THE Sanitary Council of Alexandria has issued orders that the regulations to prevent the introduction of cholera into Egypt be strictly applied to vessels from Red Sea ports.

BROOKLYN's death-rate is on the increase. There were 552 deaths during the week ending July 5th, representing an annual death-rate of over 33 in every 1,000.

THE AMERICAN DERMATOLOGICAL ASSOCIATION will hold their fourteenth annual meeting at Richfield Springs, New York, September 2, 3, and 4, 1890.

THE American Society of Microscopists met in Detroit on the 12th, 13th, 14th, and 15th of August.

INFORMATION has reached Bonne Bay, Newfoundland, that a violent outbreak of diphtheria has occurred at Red Bay, a fishing settlement on the Labrador coast. The place is in a bad sanitary condition, and it is said that more than half the people are ill.

WIFE (affectionately): "How is your rheumatism this morning, John, dear?"

Husband: "Pretty bad, my dear: pretty bad."

W.: "Why don't you try the mind cure?"

H.: "There ain't any thing the matter with my mind. It's my joints, dear—my joints."—*The Medical Summary.*

THE ptomaine produced by the bacillus of mice septicemia is called methyl-quanidyne. One thirty-second of a grain is sufficient to kill a rabbit.

THE eighteenth annual meeting of the American Public Health Association will be held at Charleston, S. C., December 16, 17, 18, and 19, 1890.

REPORTS from Madrid, July 15th, state that in the last two months there had been 445 cases of cholera in Spain. Of these 251 had been fatal.

KLEIN renews the warning against fondling cats; which, he says, are liable to a pulmonary disease which in man produces diphtheria, and is produced by the latter.

It was reported from St. Petersburg, July 18th, that cholera was prevalent in Kowno and Vienna, and was spreading. Many fatal cases of the disease were reported.

DR. J. R. PARTENHEIMER was called to a patient at Ardmore, who sent his carriage to bring the doctor from the station to his residence. The horses ran off, and the doctor was severely injured. For this he sues the patient for \$25,000.

It is reported that recently a New York baby fell five stories and landed unhurt, except for a little bump on its forehead and a slight sprain of one of its ankles.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., AUGUST 30, 1890

No. 5.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

CHEMICAL AIDS TO THE DIAGNOSIS OF DISEASES OF THE STOMACH.*

BY SIMON FLEXNER, PH. G., M. D.

The stomach is an organ made up of several tissues and affording a secretion of peculiar composition and potency.

The tissues composing the stomach are separable into muscular and mucous, with an intervening connecting medium of finely fibrous structure. These tissues are supplied with vessels and nerves which penetrate their substance, ramify within their walls, bring nourishment and innervation, supply the necessary elements and impetus for the elaboration and secretion of the gastric juice, and finally carry away the product of the vital activity of the organ.

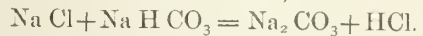
The muscular tissue composing the stomach is of the involuntary type, is separable into layers, and varies in thickness in different parts of the organ. The mucous membrane covers the muscular layer throughout and varies only with the nature of the glandular bodies imbedded in its substance.

The glands of the mucous membrane are either mucous or peptic. In the great *cul-de-sac* the peptic glands are found in largest numbers, while the mucous glands predominate in the pyloric region. The glands of the pylorus present a paler appearance than those of the cardiac portion, and this difference coincides with

the absence in the pyloric glands of certain ovoid cells present in the glands of the greater curvature.

Heidenhain believed that the ovoid cell found in the peptic gland possesses that metabolic power which produces the hydrochloric acid from the elements of the blood, and that all of the glands produce pepsin. In confirmation of this he claims to have proved experimentally that the secretion of the pyloric gland possesses peptogenous power after acidulation with hydrochloric acid. Dr. L. Wolff, in conjunction with Dr. E. Davis, conducted experiments at the Philadelphia Hospital on the gastric secretion of normal infants; and found hydrochloric acid absent. Simultaneously it was stated that the tubules of the peptic glands of the infantile stomach contain no ovoid cells. On the other hand, Dujardin-Beaumetz insists on the distinct properties of the two kinds of glands, and believes that in certain pathological conditions the peptic or ovoid epithelium ceases to be reproduced, and that many peptic glands are transformed into veritable mucous glands.

The production of hydrochloric acid from the elements of alkaline fluids, such as the blood and lymph, can be conceived on the supposition of the decomposition of chloride of sodium by the acid carbonate (bicarbonate) of sodium, both of which are present in these fluids. This decomposition is effected by means of the ovoid cells of the peptic tubules which secrete the acid and return the resulting carbonate of sodium to the blood,



The nature of the essential acid of the gastric juice has been debated by the most eminent physiologists, and has been variously held to be phosphoric, sarco-lactic, lactic, or hydrochloric. It has been demonstrated that phosphoric acid, while present during digestion, does

* Read by invitation before the Central Kentucky Medical Society, at Danville, Ky., July 16, 1890.

not occur in an uncombined state, and it is now generally conceded that the acids which occur in a free state during digestion are lactic and hydrochloric. We have already seen how hydrochloric acid is obtained, and it only remains to be said that lactic acid is not a product of the metabolic activity of the glands of the stomach, but is produced by fermentative changes in the carbohydrates ingested. Indeed, if the diet be confined strictly to the albuminoids, lactic acid does not appear in the digestive fluid.

At the beginning of the digestive act, and for the first half hour thereafter, lactic acid alone is found in the stomach; then succeeds a very brief period during which both lactic and hydrochloric acid are present, and during the final stage hydrochloric acid alone can be detected. This stage begins one half to one hour after eating. It is probable that hydrochloric acid is secreted at once on the ingestion of food, but it immediately combines with the albuminoid substances present, and with certain bases and salts, and is not found in a free condition at this stage of the process. As the secretion of hydrochloric acid continues a point is reached at which the lactic fermentation, being no longer possible, is suppressed, and from that time until the digestive act is completed there is no further formation of lactic acid in a normal condition.

The gastric secretion has been studied by C. Schmidt, who estimated all the combined chlorine, and found a free residue of hydrochloric acid amounting to 2.5 to 4 grams per liter, equalling 0.25 to 0.4 per cent. Miguel ascertained that a solution of hydrochloric acid containing from 0.2 to 0.3 per cent of mineral acid sufficed to preserve meat broth from decomposition, and Seibert showed that 0.5 per cent would prevent the decay of chopped meat. Finally, in Hoppe-Seyler's laboratory it was proved that normal gastric juice contained 0.3 per cent hydrochloric acid.

Rosin introduced a soft rubber tube into the stomach of a number of individuals free from gastric disease, the time chosen for the experiments being the early morning hours before breakfast. In only two out of forty-four such experiments did he fail to obtain a sample of gastric juice, the amount of which in the forty-

two positive cases varied between three c. c. and twelve c. c. In thirty-one of these forty-two cases the juice contained free hydrochloric acid. Ewald and Boaz confirm the experiments of Tiedmann and Gmelin, which tended to prove that under normal conditions the fasting stomach contains no gastric juice, and suggest that Rosin's results can be explained by the irritation of the gastric mucous membrane by the tube. The experiments of Dr. Kinnicutt, of New York, would confirm those of Ewald and Boaz, while Schiff has, by the introduction of innutritious boluses into the empty stomachs of dogs, shown that in them there is as a rule no secretion, and where a few drams of liquid were obtained it was devoid of digestive power.

Having taken a rapid glance over the salient features of the stomachal structure and processes, we can apply certain facts of a chemical nature to elicit the condition of these processes. The muscular coat of the stomach has for its function the agitation of the alimentary mass within this viscus, its impregnation with the gastric juice, and its rotation toward and through the pyloric valve into the intestine. This motor power, considered by some authorities as the most important function of the stomach, is recognized as being deficient in certain pathological states, and for determination of this fact Ewald and Sievers proposed the employment of salol, the properties of which render it peculiarly applicable. As is well known, salol remains unaffected by the acid secretion of the stomach, but is immediately decomposed by the alkaline intestinal juice into salicylic and carbolic acids. Salicylic acid is eliminated with the urine and can be detected in it by appropriate tests. The time required to detect the acid in the urine is taken as an index of the motor power of the stomach. Unfortunately the process to detect salicylic acid in the urine is an elaborate one, and the diet has much to do with the rapidity of the decomposition, as it affects the reaction of the intestinal juice. Hence, it has been recommended by Huber to modify the method so as to take into account the time required for complete excretion of the acid with the urine, rather than its first appearance. For in some cases of undoubted motor

deficiency the salicylic-acid reaction could be obtained on the second day after the administration of fifteen grains of salol in pills or capsules.

Kemperer introduced the method of injecting a quantity (100 grams) of olive oil into the stomach, and withdrawing the residue after two hours. As oil is neither affected nor absorbed by the stomach the difference between the amount introduced and the residue removed indicated the motor power. A series of experiments proved that a healthy stomach will discharge between seventy and eighty grams of the oil in two hours. In thirteen cases of gastric catarrh the motor power was so insufficient that from twenty-three to forty-four grams only were expelled in the given time.

The absorbent power of the mucous membrane has, by the test introduced by Penzoldt and Faber, been proved to be retarded in various pathological conditions, among them cancer, ulcer, and chronic gastric catarrh. Three grains of iodide of potassium are administered in a carefully wiped gelatine capsule, and the saliva, which has been previously shown to be free from iodine, is tested every minute for this substance, by placing a drop of it on a piece of filter-paper saturated with starch-paste and adding a drop of fuming nitric acid. In dealing with the healthy stomach the reaction for iodine is obtained in from six and one half to eleven minutes. In applying this test the stomach must be free from vegetable astringents and alcohol, as they render the gelatine insoluble, and a time shortly before a meal should be chosen; for when the iodine is administered to a healthy person immediately after a meal the reaction does not appear until twenty to thirty minutes have elapsed.

The examination of the gastric juice can be of great value to the practitioner, not only as a diagnostic sign in gastric cancer, but as affording a means of identifying various functional irregularities. The gastric secretion is in health quite constant in composition, and owing to its peculiar properties is capable of preserving the ingesta from decomposition while peptonization is in progress. This antiseptic power is possessed, as we have seen, by the hydrochloric acid of the gastric juice, and, indeed, the fail-

ure of the hydrochloric acid to put in its appearance at the proper time, or in the proper amount, constitutes a well-marked irregularity. The conditions favorable to putrefaction are present in the stomach and lead rapidly to putridity of the ingesta where the antiseptic is wanting. Indeed, Dujardin-Beaumetz has constituted this condition a prominent factor in his classification of dyspepsias and calls it "putrid dyspepsia." Again, the production of lactic acid is dependent on the absence of hydrochloric acid, and the inhibition of its formation is furnished by the hydrochloric acid. Should the formation of lactic acid continue longer than the normal period, and the quantity be excessive, a series of pathological symptoms are produced.

Gastric juice intended for examination should be taken when the digestive process is at its height, and when the ingesta will not interfere with the removal of the liquid. The vomit should not be used. The best method is to give an early meal, known as the "trial breakfast." This consists of a few pieces of bread or bun, in all two or three ounces, and a cup of water or tea. A soft-boiled egg has been used, as it has been shown that in the healthy stomach it disappears in one and one half hours. However, under pathological conditions this time may be greatly lengthened and the withdrawal be made difficult. Another objection is that a part of the hydrochloric acid secreted unites with the albuminoids and is not indicated in the test. One and one half hours after the meal a flexible fenestrated stomach-tube is introduced into the stomach, and a syringe having been attached, a small quantity of fluid is withdrawn, not more than two or three drams being required.

As a substitute for the use of the tube to obtain the secretion of the stomach, Edinger and Späth have suggested the use of particles of elder pith stained with various reagents. Certainly this method can only be used to indicate acidity, the nature of the acid, perhaps, but not the quantity. Likewise leaden balls, to which are attached threads stained with the test agent, have been used.

To determine the total acidity five c. c. of the filtered juice are carefully titrated with

deci-normal solution of sodic hydrate, using phenol phthaline or litmus as indicator, and the result multiplied by twenty to obtain the percentage. As this process is not well adapted for the practitioner, and often an approximation will answer his purpose quite well, I will ask your attention to another method. In the first place it is desirable to know whether lactic acid is present or not in the sample under examination. Uffelmann's test consists of a two-per-cent solution of carbolic acid in water, to which a few drops of an aqueous solution of neutral ferric chloride have been added, so as to obtain a steel blue color. If to the filtered gastric juice a few drops of this test be applied, it will be decolorized if hydrochloric acid alone be present; if lactic and hydrochloric acids both be present, the solution will assume a yellowish tint, while in the presence of lactic acid alone a reddish-yellow color is produced, and the intensity is an approximate measure of the amount.

A more delicate and reliable test for lactic acid is derived by adding two to five drops of a watery solution of perchloride of iron to fifty c. c. water. The faint yellow color of the fluid, while not affected by hydrochloric, butyric, or acetic acids, is intensified in the presence of dilute lactic acid.

Laborde first drew attention to the value of methyl-violet as a delicate test for hydrochloric acid. This substance is not affected by lactic or fatty acids and rapidly responds to the presence of minute quantities of hydrochloric acid, which changes its color to a greenish-blue. Taking advantage of the limit of delicacy (1-2,500) of this reagent Dr. L. Wolff has shown that it may be used for approximate quantitative estimations. An acid having the strength of the gastric juice can be prepared from the dilute hydrochloric acid of the U. S. P., which contains ten per cent HCl by diluting one part of it with two parts of water; then, diluting the resulting mixture with ninety-nine parts of water, an acid liquor is obtained containing 0.33 per cent hydrochloric acid, a close approximation.

This "standard" solution is then diluted with successive definite portions of water until it fails to affect a weak aqueous solution of the

methyl-violet. After this any specimen of gastric juice can be examined and its acidity compared with the "standardized" liquor, an acidity, normal acidity or hyperacidity being indicated. A more delicate reagent is tropeolin OO. An aqueous solution of this agent is orange yellow, and the faintest trace of mineral acid immediately changes it to a beautiful red or brownish red. Wolff has determined the delicacy of this substance to be 1-3,500 of hydrochloric acid, while 1-500 is the greatest dilution of lactic acid that will affect it, and 1-100 acetic acid is without effect.

An agent of still greater delicacy is Günzberg's reagent, which is composed of two grams of phloroglucin and one gram vanillin dissolved in thirty grams of alcohol, which is delicate to a dilution of 1 to 10,000 of hydrochloric acid. This solution, which has a yellow color, gives at once with a strong mineral acid a dark red color with deposition of red crystals. To apply it to a weak acid solution, such as the gastric juice, the fluid must be evaporated at a temperature below the boiling point of water until the hydrochloric acid becomes strong enough to give a reaction. Mix two or three drops of the reagent and an equal quantity of the juice to be examined in a watch-glass and evaporate over a water bath. If hydrochloric acid is present, the residue assumes a red color. If the acid is in very minute quantities, a distinct red outline only will appear.

Congo red, used either as a test paper or in solution, has been proposed by Prof. Riegel. This reagent has been found by Dr. Wolff to be sensitive to 1-20,000 hydrochloric acid, but it is affected by lactic acid (1-5,000) and by acetic acid (1-3,000.) While, according to some, it is the most delicate test for acidity known, and where no reaction is obtained with it total anacidity may be assumed, yet the nature of the acid indicated by it must be determined by other means.

On the other hand V. Jakseh states that the benzo-purpurin 6 B test papers are more sensitive than the Congo red. To use the benzo-purpurin test one of the papers is placed in the gastric juice, and if it contains as much as 0.4 per cent HCl it immediately assumes a dark blue color. Organic acids or an admixture of

these with hydrochloric acid give a brownish-black tint. To decide the nature of the acid producing this coloration the paper is dropped into ether, when the color due to organic acids will disappear, leaving a lighter stain, or restoring the original tint, as an organic acid is present with the mineral acid or alone.

The digestion test is made by exposing 0.1 gram coagulated albumen in a thin sheet to the action of four or five c. c. of the filtered gastric juice and noting the time required for its digestion. Under normal conditions this should be accomplished in one to one and a half hours, at the temperature of the body.

Propepton is probably a transitional form of pepton, and during the height of digestion only traces can be found, while pepton is present in abundance. Hence the presence of propepton in large amount at this stage of digestion would indicate a deficiency of this function. Two or three c. c. of filtered gastric juice are added to an equal amount of a saturated solution of chloride of sodium to which two or three drops of acetic acid have been added. The precipitate thrown down is propepton. For the recognition of pepton the biuret reaction is employed. Before applying it propepton must be excluded, and the test consists of mixing together two or three c. c. of the filtered gastric juice, one c. c. liquor potassiae and a few drops of a one-per-cent solution of sulphate of copper. If pepton be present a purple-red color is developed.

Hammersten's ferment (the milk-curdling ferment) is always present in health, with the possible exception of infants from one to two days old. Schumburg and Boaz found it to be absent in serious disorders of the stomach, such as cancer and atrophy of the mucous lining. They also state that it is in excess in conditions of hyper-secretion and undue acidity, and that when the hydrochloric acid is wanting or greatly diminished the ferment is absent or reduced in quantity. It may be detected by adding to two to ten c. c. of cow's milk, of neutral reaction, which has been well boiled, an equal quantity of gastric juice previously carefully neutralized and filtered. The mixture is kept at a temperature of 30° to 40° C. (86° to 104° F.) for twenty to thirty minutes. If the fer-

ment is present the casein of the milk will be precipitated in flakes.

The reaction involved in the transformation of starch and the production of intermediate substances may suffice to elucidate some facts of stomachal digestion. In a normal condition, one hour after the ingestion of food containing starch no coloration can be obtained with iodide of potash solution, that is, neither the blue of starch nor the red of erythro-dextrin, if the gastric juice be examined.

Should either of these reactions be obtained, some cause delaying the amylolytic process must be sought. This may be either deficient secretion of saliva and insufficiency of diastasic power, or an excessive secretion of free acid at the beginning of digestion whereby the amylolytic process is prevented.

The industry and penetration which have been brought by numerous investigators to bear on the obscure questions of the stomach and its activities in health and disease have not been without practical benefit. That there have resulted many definite conclusions is indicated by the preceding *resumé*. I feel that I have, perhaps, already exceeded the time allowed me, but I will for a few moments make a further demand on your patience, in order to outline some of the practical applications of the chemical processes which have been considered. In doing this it will not be my intention to define all the clinical features of the diseases named, nor will treatment receive any consideration; but the state of the motor, absorptive and secretive processes, as demonstrable by the foregoing tests, will be reviewed.

Hyperacidity. When the gastric juice contains an increased quantity of hydrochloric acid, amounting at times to 0.4 per cent to 0.6 per cent, certain symptoms embraced under the collective term of pyrosis result. The pyrosis hydrochlorica, as this condition is denominated, should be carefully distinguished from that produced by an excess of lactic acid, the pyrosis lactica. Where the pyrosis follows soon after the ingestion of food it is usually of the lactic acid variety, and then the percentage of hydrochloric acid is probably diminished. The clinical distinction is important, and this is made evident when the effect of treatment by

alkalies is considered. For the administration of bicarbonate of sodium, so effectual when there is excess of hydrochloric acid, is useless and even harmful in the hyperacidity produced by lactic acid. Bourget has shown that in excessive production of lactic acid the neutralization with bicarbonate of sodium favors the further increase of it, as it furnishes a suitable soil for the growth of the lactic ferment, whereas, as has been stated, hydrochloric acid speedily suppresses its formation.

Hypersecretion. In this condition the percentage of hydrochloric acid is not increased, but the quantity of gastric juice secreted is greatly augmented.

Subacidity. This condition is commonly encountered in chronic gastric catarrh, and is associated with motor insufficiency and oftentimes deficient power of absorption. Coincident with the decreased acidity there is diminished digestive power and increased formation of mucus. Bacterial and yeasty development is excessive, and there is a formation of various organic acids, lactic, acetic, and butyric. Owing to the insufficiency of the hydrochloric acid, septic changes in the ingesta occur and veritable putrefaction may succeed. Intimately associated with decomposition is the formation of ptomaines, many of which are poisonous in the highest degree. The production and absorption of these bodies may explain in no small way many obscure manifestations of gastric disease.

Anacidity. Under the head of hyperacidity I purposely omitted mentioning the fact that in ulcer of the stomach this condition is present. Prof. Riegel has published a series of examinations, three hundred and eighty-two in number, made by him, of the gastric juice in forty-two cases of this disease. In every instance the percentage of hydrochloric acid at the height of the digestive act was found increased. Percentages of 0.4 to 0.5 were frequent, and he concluded that hyperacidity is a concomitant of gastric ulcer.

Rosenheim's observations in eight cases are not so positive, as he found hyperacidity in two cases only, but never anacidity. Kinnicutt in four consecutive cases found hydrochloric acid always present, but within normal limits. In

gastric cancer, on the other hand, it must be admitted there is often total anacidity so far as the hydrochloric acid is concerned. It had been stated as long ago as 1842, by Golding Bird, that in the course of gastric cancer the secretion of hydrochloric acid became progressively less. Van der Velden has stated that it is not to be found in the disease, and many others have given the results of their observations. In thirteen cases reported by Riegel, in which two hundred and seventy-four analyses were made, free hydrochloric acid was never detected. In three other cases a feeble reaction for hydrochloric acid was obtained in the early stages. In fourteen out of sixteen cases reported by Rosenheim no free hydrochloric acid was encountered, although in one it was present, but persisted for a short period only, while in the remaining one the result was unreliable. In eight cases reported by Dr. Kinnicutt, with one hundred and thirty-two analyses and four autopsies, free hydrochloric acid was demonstrable in two cases only. In each of these a trace only was found and its presence was evanescent. From a recent analysis of twenty-one cases by Dr. H. P. Voinovitch, of St. Petersburg, in which nineteen autopsies were performed, the following conclusions were deduced: (1) In an overwhelming majority of cases (in nineteen out of twenty-one) of gastric cancer, the gastric juice does not contain any free hydrochloric acid. (2) In a majority of cases pepsine seems to be also absent. (3) Hammarsten's ferment is always absent. (4) The absorptive power of the stomach is invariably considerably decreased. (5) In cases of cancer of the cardia and esophagus the motor power of the stomach remains normal, or sometimes proves to be increased, while in those of the pylorus it is exceedingly diminished. (6) As a diagnostic sign in regard to gastric cancer, the absence of hydrochloric acid, when established by repeated careful examinations, must be placed on a level with the presence of a tumor in the epigastric region.

In conclusion, the classification of Ewald as quoted by V. Jaksch is given as illustrating the chemical composition of the gastric secretion in three forms of gastritis.

"1. In the first form, simple gastritis, the

trial breakfast is never followed by increased acidity; the proportion of hydrochloric acid is diminished; the secretion contains little pepsin and milk-curdling ferment, and generally, though not always, includes lactic and fatty acids. On the addition of acid the secretion shows digestive activity.

"2. In the second form, mucous catarrh, acidity is always slight and hydrochloric acid absent; there is abundance of propeptone, but no peptone. Milk-curdling ferment absent. Artificial digestion requires the addition of hydrochloric acid, or the ferment may develop only after a prolonged interval.

"In atrophic gastritis the fasting stomach is usually empty, and its contents, after the administration of the test meal, are free from mucus and altogether wanting in pepsin and the milk-curdling ferment."

LOUISVILLE.

PERIODICAL HYPERESTHETIC RHINITIS.*

J. B. KINNAIRD, M. D.

Many conflicting theories have been advanced to explain the cause of hay-fever. At the present time it is utterly impossible to arrive at a definite conclusion. The researches of rhinologists, and the various theories deducted therefrom, are exceedingly interesting, but are not satisfactory. The etiology of this disease has been explained in many ways.

Many contend that it is a purely local disorder, and arises from certain irritating substances coming in contact with the diseased mucous membrane of the nasal passages.

The first observer that undertook to describe the manifestations of the disease, and to explain the cause, was Bostock, who was subject to attacks. He attributed the cause to heat.

The presence of vibriones in the nasal cavities was believed by Helmholtz to be the cause. Reasoning from this standpoint, the use of germicidal remedies was advocated.

Some observers believe in the neurotic theory. According to their observations there must be an hyperesthetic condition of the

mucous membrane lining the nasal cavities, coupled with a peculiar derangement of the nerve centers, inducing a special susceptibility to irritants floating in the atmosphere during certain seasons of the year.

Early writers attributed the cause to hay, hence the misnomer, "hay-fever." In reply to Dr. Beard's inquiries thirty-three different agents were accused as determining factors of the disease. The large majority of sufferers have the attack determined by pollen from the rag-weed. Observers in this country, as well as in Europe, have found that dust, which is present more or less in the atmosphere everywhere, produces an attack in the susceptible subject.

Experimenters have found that it is not the dust alone that brings on an attack, but the pollen of grasses, weeds, and cereals, which are conveyed by the dust.

Of predisposing causes heredity is the most conspicuous. Two or three generations of the same family have been subject to the disease. Statistics show that there is an individual peculiarity, the nervous temperament predominating. They also show that the cultured classes of society and brain-workers are most frequently attacked.

It is rare to find the very young attacked, although exceptional cases have been recorded by writers. It is usually more common in youth and middle age, and is more prevalent among males. Negroes are not subject to the disease.

The neurotic theory is open to objections. Why should not the neurotic subject be attacked at any season of the year? Why do the attacks appear periodically? Sajous, in his recent work on "Diseases of the Throat and Nose," recognizing the difficulty of giving a precise definition of this disease, says, "Three conditions are essential factors in the production of an access of hay-fever: Firstly, an external irritant; secondly, a predisposition on the part of the system to become influenced by this irritant; and, thirdly, a vulnerable or sensitive area through which the system becomes influenced by this irritant."

That pollen causes an access of the disease can not be doubted, for we know that it makes

*Prepared for the May meeting of the Kentucky State Medical Society, 1890.

its appearance periodically just about the same day, and often the same hour, each year in the latter part of August, when the air is loaded with pollen from weeds and cereals. Dust alone can not produce an attack. During the winter the atmosphere is often loaded with dust, yet we never see an attack in that season. It is only during the summer and autumn when the flowering plants and ripening grain are dispensing their emanations that we observe periodical hyperesthetic rhinitis.

Immunity from an attack can be obtained by resorting to some locality that is free from those agencies that produce an access. It is impossible to find a location, except upon the sea distant from land, where there is total immunity. A change in the direction of the wind may bring the pollen of plants from some distant place and cause an outbreak of the disease at any time. It is a well-known fact that such resorts near the seashore, which have been free from epidemics of hay-fever, have, by a sudden change in the direction of the wind, brought the disturbing element from the land. Many sufferers are compelled to travel from one exempt locality to another for relief. The irritating quality of the exciting agent is not the only cause of an attack, for the noxious element may affect some while it will not affect others.

So-called "exempt localities" do not invariably afford immunity. They afford immunity only to those who are not affected by emanations that are present within the radius which favors an attack.

While the pollen of ragweed may be present in the atmosphere of a certain locality, only those who are susceptible to that irritant will be affected, and those who are affected by other agents will be exempt.

Those who hold to the neurotic cause attribute the nervous symptoms to a reflex irritation from the local trouble and not a disturbance primarily of the nerve centers. "Both systemic and local elements must exist simultaneously to render a paroxysm possible." (Sajous).

Observers who maintain the anatomical and nervous basis of the disease do not deny that pollen and other irritants produce an access.

According to Harrison Allen, J. N. McKenzie, Sajous, and others, hay-fever subjects "are all alike in presenting certain peculiarities in the anatomy of their nasal cavities." Allen believes that the cause arises from obstruction of the nasal cavities by deflection of the septum, hypertrophy of the soft parts and bones, or turgescence of the mucous membrane, and an undue prominence of the inferior turbinated bone. Daly, Roe, Sajous, and others, held that there is an unusual development and undue excitability of the mucous membrane covering a "sensitive area" known to be continuous with the inferior turbinated bone. Hence the symptoms are reflexes induced by irritation of this area which possesses abnormal vaso-motor excitability.

The neurotic theory is not fully accepted by the profession; until something positive is discovered it is certainly the most scientific view of the etiology of the disease.

The diagnosis of this malady is usually easy. The symptoms vary. Sometimes there is present only a slight cold. The mildest cases are those appearing early in the summer. In some cases there is only itching of the inner canthi, lachrymation, injection of conjunctiva, tickling sensations in the larynx, and itching in roof of mouth, with slight sneezing and headache. In other cases the foregoing symptoms are greatly intensified, the itching in the nostrils is severe, and followed by the most distressing sneezing. Tears flow down the cheeks, the inner canthi are excoriated, and there is present a pricking, often burning sensation in and around the inner canthi. The itching in the roof of the mouth grows more intense, the nostrils become occluded, a watery discharge follows; there is then loss of smell and taste, chilly sensations, headache, malaise, tinnitus aurium, and considerable fever. A violent conjunctivitis may follow with its train of unpleasant symptoms. The photophobia may require confinement to dark room for a variable length of time.

A muco-purulent discharge may succeed the watery and serous discharge from the nostrils. Asthma is not always present. It may not appear until the third or fourth week, or it may be one of the first and most serious manifestations.

Bronchial symptoms manifest themselves usually within one week from the commencement, and there is a tickling cough followed by the expectoration of mucus.

In ten or twelve days, after a harassing experience, the coryza and cough lessen in intensity, the coryza disappearing in two weeks.

The whole course of the disease extends over a period varying from two to four weeks. The annoyance and worry by day and the long train of nervous symptoms that sometimes accompany the disease, renders the subject despondent and melancholy. He can look forward with no degree of pleasure to the lovely days of summer, of which the poets sing, for he knows almost the day, sometimes the hour, when warm, depressing breezes will waft to him an element destructive of peace and happiness. In summer the sweet-scented hay does not create in him a desire to sing of new mown hay; in the autumn he does not wish to celebrate in verse the "eloquence of decay." Thoughts of Charon with his dusky boat, and a desire to cross the Stygian lake, constantly fill his mind, while other fortunate ones look forward with pleasure to the scorching days of summer when they can seek cool, sequestered glens free from care and weltering heat to enjoy the blessings of life.

Only a small proportion of those who suffer with hay-fever have an opportunity to visit exempt localities. For those who are compelled by circumstances to remain at home to battle with the disease we are forced to give some treatment for their relief. Knowing there is an altered condition of the nasal passages, our first effort should be to discover the cause. In the great majority of cases there will be found an inflammation with turgescence of the mucous membrane which will demand our attention. Sometimes there will be found polypi, sometimes hypertrophy. If polypi are present, their removal by Jarvis' snare must be accomplished. The hypertrophy should be removed by galvano-cautery, or caustics. Galvano-cautery is the surest, safest, quickest, and least painful method, but caustics, such as chromic, glacial, acetic, nitric, or carbolic acid, can be used, but with less precision and with greater difficulty. The "sensitive area," whether found at the poste-

rior end of the inferior turbinated bone (McKenzie, J. N.), or "anterior extremity of the inferior turbinated bone," must be cauterized from day to day until every sensitive spot has been touched. The time of operation, in the opinion of some, is immaterial. Some prefer operating previous to an attack; others cauterize during an attack.

Should deviation of the septum be the cause, this should be corrected. After caustics have been applied local treatment should follow.

In rhinitis the nasal cavities should be thoroughly cleansed with alkaline solutions, after which astringents in warm oily preparations should be applied with spray producer. Combining cocaine with the preparation used, which should be either purified vaseline, or liquid cosmoline, or fluid albolene, the sensitive area will be rendered anesthetic for a while and will prevent or mitigate an access. If the treatment is begun in time the attacks can be controlled. By putting the system in good condition to resist the disease, and removing the cause, which can be done by suitable tonics, proper regulation of diet, regular habits, avoidance of stimulants and exposure, and proper local and surgical treatment, there are good grounds for believing that we can prevent the recurrence of attacks in many obstinate cases.

LANCASTER, K. Y.

PARALACTIC ACID IN THE URINE IN ACUTE RHEUMATISM.

BY C. J. RADEMAKER, M. D.

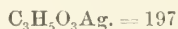
The urine in rheumatism is of a high specific gravity (1.024 or more), of a very dark color and a strong acid reaction to litmus paper. The urine passed during a six weeks' attack of rheumatism was regularly collected and evaporated on a water-bath to a syrupy condition, and then extracted with 95 per cent of alcohol. The alcoholic solution was filtered from the precipitate after standing twenty-four hours. The filtered solution was evaporated to a syrupy condition and made acid by means of dilute sulphuric acid. This acid solution was repeatedly shaken with ether until the liquid was completely exhausted of every thing soluble. The ether distilled off, the residue was dissolved

in water, and this solution treated with a little solution of basic acetate of lead and filtered. The filtrate was next treated with H_2S , again filtered, and the filtrate evaporated on a water-bath to expel the acetic acid. The residue was found to be liquid of a syrupy consistence, a sour taste, unctuous feel, and acid reaction to litmus paper. Part of this acid was neutralized with ammonia, but upon evaporation no crystallizable salt was obtained. This solution was treated with a solution of nitrate of silver, but no precipitate was produced; to this solution absolute alcohol was added, when the silver salt of the acid gradually separated in needles of a silky, glistening appearance, which blackened when exposed to light. This salt is almost insoluble in cold, but dissolves slightly in hot, alcohol. In water it is soluble. 0.100 milligram of the silver salt left after incineration .055 milligram of metallic silver. $0.100 - .055 = .045$ milligram of loss due to the acid.

Silver left.	Acid loss.	Eq. of Silver.
.055	: .045	:: 108 : $x = 89$
Add to this 1 atom of Hydrogen..... 1		

Which makes the molecular weight of the acid 90

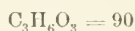
The silver salt was calculated for



197	:	36	::	100	:	$x =$	18.27	per cent C
197	:	5	::	100	:	$x =$	2.54	per cent H
197	:	48	::	100	:	$x =$	24.37	per cent O
197	:	108	::	100	:	$x =$	54.82	per cent Ag.

100.00

The acid was calculated for



90	:	36	::	100	:	$x =$	40	per cent C
90	:	6	::	100	:	$x =$	6.6	per cent H
90	:	48	::	100	:	$x =$	53.4	per cent O

100.0

Found, 0.1234 gram of acid gave 0.1843 gram of $CO_2 =$ to 40.8 per cent of Carbon, and

.0734 gram of $H_2O =$ to 6.6 per cent of Hydrogen.

$0.1234 - .05036 + .00815 = .06489$ of O to 52.6 per cent of Oxygen.

100	:	40.8	::	90	:	$x =$	36.72	of C
100	:	6.6	::	90	:	$x =$	5.94	of H
100	:	52.6	::	90	:	$x =$	47.34	of O

90.00

36.72	÷ 12	=	3 Carbon	=	36 C
5.94	÷ 1	=	6 Hydrogen	=	6 H
47.34	÷ 16	=	3 Oxygen	=	48 O

90

A zinc salt of this acid was prepared by decomposing a solution of the ammonia salt with sulphate of zinc. The zinc salt of the acid was not separated until alcohol was added to the solution. It then separated in short prisms. This zinc salt was almost insoluble in alcohol, but soluble in 17.5 parts of water. 0.24 gram of this salt was heated for two hours at a temperature of 230° Fahrenheit, when it lost 0.03 gram of water; this is equal to 12 per cent. Paralactate of zinc contains 12.9 per cent of water of crystallization. 0.1 gram of the anhydrous zinc salt left after incineration 0.032 gram of zinc oxide $=$ to 25.68 per cent of metallic zinc. Zinc lactate requires 26.78 per cent of zinc. 0.1 gram of anhydrous calcium salt left after incineration 0.046 gram of $CaCO_3 =$ to 18.40 per cent of calcium.

Calcium. Loss due to acid. Eq. of Calcium.

18.40	:	81.60	::	40	:	$x =$	178
Add to this 2 atoms of Hydrogen..... 2							

$=$ 2 molecules of acid.....180

The physical properties of this acid and its salts and the chemical analyses conclusively prove that this acid is paralactic acid.

LOUISVILLE.

Societies.

LOUISVILLE CLINICAL SOCIETY.

Stated Meeting, May 6, 1890, Dr. W. Cheatham.
President, in the chair.

Dr. W. O. Roberts reported the following case: A woman eighteen months since developed cancer of the breast, which Dr. R. removed. After four or five months he was called, and found her suffering apparently with rheumatism. In spite of treatment the pain continued, and the limbs underwent considerable shrinkage. One morning, in attempting to get out of bed, she broke the femur of the right side in the upper third. It was noted that the femur of the opposite side had bent under the weight of the body without breaking. The broken bone was put up in plaster and healed with usual rapidity. The urine of the patient was heavily loaded with phosphates.

Later the speaker saw a case of fracture of the shaft of the femur in an old lady who broke

the bone while turning in bed. Recalling the other case, wherein brittleness of bone was associated with malignant disease of the breast, the doctor examined the breasts of this patient and found a cancer which she had concealed. In this case the healing of the fracture was rapid. This patient, like the other, had excessive phosphaturia, which is a constant symptom of *mollities ossium*. The constitutional treatment employed in these cases was iron and strychnine. It is uncommon to get prompt union of broken bones in *mollities ossium*. In the first case reported bone softening upon one side was demonstrable, in the other excessive phosphaturia rendered this condition probable; but *fragilitas ossium* was evidenced in both by the pipe-stem fractures, under little force, which they sustained. It would be interesting to note how often this condition of bone is found associated with malignant disease of the breast.

DISCUSSION.

Dr. T. P. Satterwhite said that he had known pseudo-rheumatic pains in the limbs to follow removal of cancer of the breast; but the association of the cancerous cachexia with bone softening or brittleness he had not yet seen. In reporting these cases Dr. Roberts suggests a line of interesting clinical and pathological research.

Dr. John A. Ouchterlony said that the association of *fragilitas ossium* with *mollities ossium* in the same subject was a peculiar phenomenon, since the two affections depended upon opposite pathological conditions. In the first there is deficiency of animal matter in the bone; in the second, deficiency of mineral matter. The speaker recalled a case of great fragility of bone, which he saw some years ago, in the person of a boy ten years of age. One day while at play he fell over a mound and broke one of his thigh bones; the fall was not heavy, and the force exerted upon the bone must have been slight. The limb was put up in plaster and healed with normal rapidity; but there was a shortening of three inches in the limb. Two years later the boy broke the other femur in a fall from a tree. This fracture healed like the other, and the union was attended with the same degree of shortening. This was a case of great

fragility of bone. It is significant that this boy was the son of a father who had softening of the brain, weak eyes, and ozena, perhaps syphilitic.

Dr. H. A. Cottell said that in such cases a quantitative estimate of the phosphates in the urine would be of clinical value. A great increase in the phosphate of calcium would be significant of *mollities ossium*, while increase in the phosphates of magnesia and the fixed alkalis would count for little. A diagnosis of phosphaturia is usually based upon a rough estimate of the earthy phosphates; but the increase of these may be due to destructive metabolism in almost any part of the system, or to the excessive eating of animal food. It will be seen, therefore, that while great excess of the phosphate of lime, taken with the clinical history, might fix the diagnosis of *mollities ossium*, the condition of phosphaturia as commonly made out would not be a symptom of much value.

Dr. Peter Guntermann reported the following case: A young lady had measles running a normal course. She took neutral mixture during the course of the disease in an unusually large amount. Nevertheless she developed inflammatory rheumatism. This succumbed to the salicylates in a few days. In the opinion of the speaker, it was remarkable that rheumatism should appear in a person who had been for some time taking alkalies. Does rheumatism often complicate measles?

Dr. Ouchterlony said that he had not seen this complication in his practice. The only test of the saturation of a patient by alkalies is alkalinity of the urine. This patient was probably not saturated, and so rheumatism developed.

Dr. W. H. Wathen exhibited the ovaria and fallopian tubes of a woman upon whom he had performed laparotomy for dermoid cyst. Both ovaries were diseased, but one only was the site of the dermoid cyst. The other contained a few small cysts with a hydatid of the fimbriated extremity of the fallopian tube. The speaker did not know whether the tube was patulous or not. The patient, aged thirty, had been married ten years, and was the mother of two or three children. She was in good health up to two or three years ago. The diagnosis was nec-

essarily obscure, but a tumor of the ovary was made out with reasonable certainty. The operation was done in the usual manner. Some of the contents of the cyst escaped into the abdomen, making it necessary to flush the cavity with hot water. A small, flaring glass drainage-tube was left in the wound. Contrary to the *dictum* of Joseph Price and others, the speaker generally gives his patients some opiate after laparotomies. He believes that, whatever objection may be made to the use of opium in such cases, more harm is done the patient, through worry and loss of sleep, by withholding it. The case reported is doing well.

Dr. Roberts said, with reference to the question of the use of morphine after ovariectomy, that he seldom meets with a case that does not require some morphine; but morphine in most cases does undoubtedly increase the tendency to nausea. He once saw a case which was an exception to the rule. He operated upon a woman who claimed to have an idiosyncrasy for opium, and who consequently got no morphine. Just after she was taken from the table she began to vomit, and did this incessantly for three weeks. Morphine was then given with caution, when it was found that a small dose ($\frac{1}{6}$ grain) would stop the vomiting for a time. The physician in attendance increased the dose until he dared to give a grain; this stopped the vomiting, and the patient recovered without an untoward symptom. In this case there was at no time acceleration of the pulse or elevation of temperature.

H. A. COTTELL, M. D.,

Secretary.

Reviews and Bibliography.

A Manual of Obstetrics. By A. F. A. KING, A. M., M. D. With one hundred and forty-one illustrations. Fourth edition. 430 pp. Philadelphia: Lea Brothers & Co. 1889.

The author announces that his chief purpose in writing this book is to give in an easy, intelligible form such an outline of the rudiments and essentials of obstetric science as may constitute a good groundwork for the student at the beginning of his obstetric studies. He also hopes it may prove of service to those whose onerous duties allow them but little leisure for

consulting larger works, and who simply desire to refresh their minds upon the more essential points of obstetric practice. He has certainly succeeded in grasping all the important points of his subject, and presenting them in as brief and concentrated a manner as is consistent with their easy comprehension. We beg leave to doubt, however, whether a full presentation of a subject does not enable the student better to understand it than an abbreviated one, especially when the student is not blessed with a good scientific imagination. There are many parts of obstetrics that are to be taken dogmatically, being purely the outcome of experience. These can not be given too briefly. Many others, however, are discoveries which go hand in hand with reason, and it would seem that these are best taught by giving the principles that underlie them.

Scire bene est per causas scire is an old maxim and a wise one, and wherever there is an underlying principle the time taken to discover it is wisely employed. For instance, to tell the student that he must first introduce the "left," "male," or "lower" blade of the forceps, or even, to put it in the mnemonic form, "the left leaves first," he will be often puzzled unless the use of the forceps with him is frequent. But if he is shown that after one blade is introduced the perineum must be pressed down with it to make room above for the second blade, he will always notice the curve and introduce the blade whose look is on top, or the male blade. Likewise in turning, if the student is taught to have in mind the fact that in turning he is to keep the thighs of the child flexed on its abdomen and to double the body on its anterior aspect, it will never fail to occur to him which hand to introduce.

The book is, however, furnished with many happy illustrations, making similar points plain and easy to be remembered. There is a studied avoidance throughout the work of theoretical matters, the ever-present speculation of the cause of head presentation not even being alluded to. The author gives his own theory of face presentations, viz., that they are due to excessive right obliquity of the uterus, a view in which, as far as we know, he is yet alone.

Altogether, in the line in which the author has projected it, the work is a most excellent one, and his task must be well-nigh fruitless who would seek for faults in its pages.

D. T. S.

A Guide to the Diseases of Children. By JAMES FREDERIC GOODHART, M. D., F. R. C. P. Rearranged, revised, and edited by LOUIS STARR, M. D. Second American from the third English edition, with numerous formulæ and illustrations. 772 pp. Philadelphia: P. Blakiston, Son & Co. 1889.

The author of this manual starts out with what seems to us the clearest conception, or at least the frankest acknowledgement, of the limitations of a treatise on the diseases of children that we have met. He seems in no instance to have gone beyond the proper domain of his theme for the purpose of padding. He writes like one who has a comprehensive grasp of his subject, and a familiarity with its details that enables him easily to select what is best in each, under each separate head, and to set it forth in just proportion. His language is select and expressive, and his style smooth, easy, and flowing. Altogether it is a very pleasant book to read, and can not but be profitable.

The American editor informs us that he has taken the liberty of rearranging the original matter so as to secure greater symmetry and ease of reference, and also that he has left off the brackets that formerly inclosed the remarks of the editor, as he believes his additions to be in the spirit of the author's writing, and in entire accord with his views.

For our part, when we read after an English author we wish to know what the English author says, and when we wish to know the American author's opinion of the same subject we prefer reading his work to itself. It may be necessary to have reprints of foreign books annotated by home talent for the purpose of protecting the reprint with copyright, but we much doubt if any house in America would republish a foreign work which had already appeared from another house, and we trust that American pride will soon put a stop to the too prevalent practice of publishing foreign works, especially works in our own language, with emendations.

It would seem fair, however, that translators should have a larger privilege.

But in spite of the fact that the reader is deprived of the agreeable feeling of intellectual communion with the real author, we have here a book that is a valuable addition to pediatric literature.

D. T. S.

Correspondence.

LONDON LETTER.

[From our Special Correspondent.]

The donkey would seem to be in danger of being requisitioned, at least in India, for purposes hitherto wholly foreign to its present uses. Surgeon Major O'Hara has lately reported to the Indian Government on the advantages of the use of the donkey as a substitute for the calf as a lymph producer, and he makes his report only after some highly satisfactory experiments on the human with lymph cultivated on the donkey. Indeed, he goes so far as to prefer this animal to the calf as a vaccine agent, holding that the lymph is equally efficacious, is obtained more easily, and at less cost; is useful for renovating calf lymph from time to time, and is especially useful during hot months when cattle are driven long distances for grazing purposes. Donkey lymph is actually in use in the Madras Presidency, while in the Punjab buffalo calves are being utilized as suppliers of lymph. In this latter province ten per cent of the operations were last year performed with animal lymph, and upward of ninety thousand persons were operated on from the buffalo calf.

Some interesting details of the course of the influenza epidemic in Ireland are given in the annual report of the Local Government Board just published. Among these is a particular statement regarding the effect of the epidemic on the lower animals. Diseases among them either preceded or accompanied influenza in human beings in nearly all parts of Ireland. In the province of Ulster horses and dogs were affected in four counties, horses only in three counties, and dogs only in the county of Donegal. In Munster, horses and dogs were affected in the counties of Clare and Kerry;

horses, dogs, and cats in the county of Cork; horses, dogs, and horned cattle in the county of Limerick, and horses only in the counties of Tipperary and Waterford. In Leinster, horses and dogs were affected in three counties; horses and horned cattle in the county of Dublin; poultry and cats in the county of Westmeath; dogs and cats in the county of Wexford, and horses only in five counties. In Connaught, horses and dogs were affected in the county of Roscommon; horses only in the counties of Galway and Mayo, and dogs only in the county of Leitrim.

At the present time, when attention is being directed to the question of the relations of diphtheria in the human to allied diseases in the lower animals, it will be of interest to many to learn of diphtheritic infection alleged to have been derived from the pigeon. A case is reported in which a pigeon fancier, who was suffering from a tumefaction of the mouth, offered food on the tip of his tongue to one of his pigeons to try thus to induce it to feed, he having lost several of his birds. This bird also died, and *post-mortem* gave evidence of its having had diphtheria. Its owner too developed unmistakable symptoms of diphtheria, false membranes having been found under his tongue, in the region where the bird had pecked, as well as on the tonsils. In the event he recovered, but not without himself transmitting the disease to his boy.

An interesting event in connection with the visit of the British Medical Association to Birmingham was when the president, Dr. Dade, presented the gold medal of the Association to Surgeon Parke, in recognition of his brilliant services during the Stanley expedition. Surgeon Parke, who was much affected by the heartiness of the welcome given him, in reply, said it was the greatest gratification to him to know that his services in connection with the Emin Pasha Relief Expedition had been so appreciated by the members of the profession to which he belonged.

A meeting in aid of the Home of Rest for Nurses has been held at the Admiralty. It was announced that Mrs. Lucas had generously offered to advance, free of interest for two years, the amount of money required to purchase a

suitable house at Brighton, and furnish it, so that the committee might at once begin to extend the benefits for which the association was started. The Home will prove an inestimable boon to the tired and overworked nurses of London. A certain number of donations were announced, including one of £20 from the Queen.

Dr. Dempsey has drawn attention to a case of placenta previa which he had treated by the introduction of a large piece of solid alum up against the os, and maintained in close contact with it by a vaginal tampon. The following advantages are claimed for this mode of treatment: In the first place it produces, by contracting and hardening the uterine fibers, constriction of the uterine sinuses; this result takes place in the lower segment of the uterus, against the outer surface of which it is in contact. Secondly, it assists in causing thrombosis of the sinuses. Thirdly, it produces a tenacious coagulation of the effused blood, which acts as an additional tampon in the vagina. Lastly, it does not prevent dilatation, and appears to obviate the necessity for the usual operative measures required in placenta previa until the os is sufficiently dilated to permit of them with safety. In the case in point the patient was a multipara, between the seventh and eighth months of pregnancy. Severe hemorrhage was taking place before the introduction of the alum, yet none occurred afterward, though the placenta was central, and dilatation had proceeded almost to the full extent. The alum was left in position for seventeen hours. At once upon its removal severe hemorrhage recurred, but delivery by turning was easy of accomplishment, without any injury to the maternal structures.

The increase of the population in England and Wales is still very rapid. According to the statistics for 1889, just published by the Registrar General, the births that year were 885,179, and the deaths 517,968, an increase of 367,211 within the twelve months without allowing for immigration. The total number now exceeds 29,000,000, or six times the population of Ireland, which was once much more than half of Great Britain. The births of men exceed those of women by 16,411, so that the

disproportion between the sexes in favor of women is due entirely to emigration and occupations abroad.

Dr. Charcot, the eminent scientist at the head of the Salpêtrière Hospital, Paris, has finished a long series of experiments in hypnotism, and gives it as his opinion that not more than one person in one hundred thousand is subject to the influence.

According to a recent calculation, the whole number of qualified medical men in Great Britain is 25,036. Of this number 4,417 are in London; 11,775 on the provincial list; 2,206 in Scotland; 1,430 in Ireland; 1,717 reside abroad, and 2,493 are in the army and navy, the Indian medical service, and the mercantile marine.

The Princess of Wales has sent a donation of twenty-five guineas to the Hospital for Sick and Incurable Children at Cheyne Walk, Chelsea, with a letter expressing her gratification at all she had seen of the work and management of the hospital on the occasion of her recent inaugural visit.

With the opening of the annual meeting of the British Medical Association at Birmingham, most of the leaders of the medical profession have left town for their annual holidays. The arrangements at Birmingham were very convenient, and, favored with fine weather, the proceedings passed off most successfully. The sectional meeting-rooms were in the buildings of the Mason College, and thus under one roof.

LONDON, August, 1890.

Bedlam Hospital.

This most interesting hospital was founded as far back as A. D. 1246, and in 1547 was presented by that most puissant monarch, Henry VIII, to the city of London and converted into a mad-house. The present buildings date from 1812, are of some extent, of a massive and rather imposing appearance. A façade of nine hundred feet, in the center of which rises a dome, presents from its approaches a very pleasing appearance. The original cost was about \$600,000. In front of the asylum, or hospital, as they are always called in England, is an extensive sward of grass laid out in flower-beds, walks, seats, etc. The capacity of the hospital

is from 400 to 450 patients. The system used here is that known as the single-room system, each patient occupying a room to him or herself.

There are a great number of attendants, there being about one attendant to five or six patients. Dr. Percy Smith, the Resident Physician Superintendent, has lately succeeded Dr. Savage, whose name is so familiar to the readers of neurological literature. Dr. Savage was connected with Bedlam for about sixteen years as medical superintendent. The staff is larger, being composed of Dr. Smith, the Resident Medical Superintendent, two assistant resident medical officers, two resident students (graduates), and from three to four "clinical assistants." A chaplain and organist assist the staff in their respective places. There are attendants, heads of departments and their assistants, to the number of about one hundred.

This asylum only receives recent cases of insanity, and its percentage of cures is high, being about fifty per cent cured and thirty per cent much benefited. The yards are laid out tastefully in gravel and brick walks with grass and flower-beds between. Croquet, lawn tennis, swings, and hammocks are numbered among the out-door pleasures, while in-doors the usual games of cards, checkers, backgammon, and chess help to while away the time pleasantly. The winter season is made agreeable by balls in the ball-room, and exhibitions in a small theater erected for that purpose.

The wards are large and pleasant, well ventilated and light. The rooms are only on one side; recesses with divans, lounges, rocking-chairs, bric-a-brac, flowers, and pictures, all tend to make the long hours seem shorter. The heating is by hot air and grates protected by heavy screens. The hospital is well furnished with books for the use of the patients, and it also boasts of a bi-monthly paper published within its walls by the patients and attendants.

Mechanical restraint is highly thought of here, and is used in the shape of (a) "soft gloves." These gloves are, I think, much superior to those of American manufacture, being made of strong cloth, padded till they are about an inch in thickness, and fastened as is usual around the wrist. The thickness of the gloves

prevents even the slightest grip. (b) "Strong dresses" of stout linen or woollen material, lined with canton flannel. The arms are closed at the distal extremity and padded. This allows of limited motion of the upper and free use of the lower limbs. (c) "Side arm dresses" of the same material as the preceding. The sleeves are run into side-pockets, preventing movements of the arms. These are very useful in those patients who pick things to pieces or remove dressings. It is much more comfortable than the strong dress. No hand-cuffs, muffs, wristlets, straight jackets, or cribs are used in this establishment.

The necessity of mechanical restraint is now recognized by all physicians. My experience as Resident Physician at the Anchorage asylum has shown me that that restraint which produces the least friction, physical and mental, and yet permits of the freest movements consistent with personal safety, is by far the best. Handcuffs, muffs, and cribs are fast being thrown aside for those milder forms of restraint which prevent or reduce to a minimum the dangers of suicidal impulses, self-mutilation, and wanton destructiveness. The study given here to the *kind* of restraint to be imposed upon such cases as need restraint is a subject that has been given great attention. The "side-arm dresses" or the "padded gloves" are especially liked.

Padded rooms for the confinement of violent patients constitute a very interesting feature of this hospital. A room eight feet square padded with horse-hair for a foot or more from the wall and covered with strong rubber; every portion of the room, walls, ceilings, and floors are protected. Light is obtained from an oval glass window in one side near the ceiling, like the port-hole windows of a great ocean steamer. A hose can be turned into this room and every portion of it cleansed. Such a room costs in England about £200 or \$1,000. These correspond to American strong rooms.

The treatment of insanity by water is limited here almost entirely to the wet-pack and water bath, the latter permitting complete immersion of the body, the temperature being regulated by faucets arranged in the covers.

The Bedlam Hospital is considered one of the best asylums in all England.

Dr. Forbes Winslow, London's great alienist, has lately founded a hospital, called after his father, the "Forbes Win-low Hospital for Mental Troubles." Dr. Winslow kindly gave me chances for the observation of mental diseases, and entertained me socially in a way that will ever make his home a bright spot in my recollections of London and her alienists.

CURRAN POPE, M. D.

LONDON, March 20, 1890.

Abstracts and Selections.

POST-PARTUM COMPLICATIONS. — The first complication is *post-partum* hemorrhage. I consider that the treatment of this should be mainly by prevention. Under this heading are three valuable items in treatment which are often overlooked:

1. The thorough clearing-out of the uterus by passing the hand into that organ whenever the amount of blood lost *post-partum* is abnormal.

2. The splendid results obtained in securing and maintaining uterine contraction by the intra-uterine injection of hot water at 110°, rendering the use of the iron solution scarcely ever necessary.

3. The subcutaneous injection of Bonjean's ergotin into the cellular tissue of the abdominal walls. This mode of injection I have practiced for at least fifteen years, and have never seen ill results from it either locally or otherwise.

Secondary post-partum hemorrhage, may be a very serious complication when due to the detachment of a piece of placenta, or a secondary placenta which was not detached at the birth. These separate masses of placenta are known under the name of *placenta succenturiata*. I saw one case where, on the tenth day, most alarming hemorrhage set in; and I removed a distinct lobule of placenta, which I have no doubt was a separate cotyledon, as the medical man assured me the placenta came away whole and entire. The reason of the profuse hemorrhage was no doubt due to the uterus having shrunk down to a point incompatible with the proper surface for the portion of the placenta left, and hence partial detachment and profuse hemorrhage. The removal of the piece of placenta caused immediate arrest of the hemorrhage.

Concealed Post-partum Hemorrhage. I have seen four cases where the child has been born and the placenta delivered, and the patient left at the end of one hour with the uterus well contracted, pulse below 100, and the discharge

normal; and yet within three or four hours afterward I have been called to see these patients apparently dying from hemorrhage, pale and pulseless, yet no external evidence of hemorrhage. On removing the binder the distended abdomen at once gave the clue to the condition, and on passing the hand into the uterus I was enabled to clear out an enormous quantity of coagulated blood; prompt injections of hot water secured uterine contraction, and the women were saved.

I was told of a similar case the other night by Dr. Champneys, of London.

Ruptured Perineum and Labium. I allude to these cases for two reasons: First, as I have seen three cases where most alarming hemorrhage occurred from ruptured perineum and labium; and secondly to urge the routine practice of stitching up the torn perineum.

I will very briefly allude to one case where a deep laceration of the left labium nearly caused fatal hemorrhage.

I attended the case myself, and congratulated myself on there being no laceration of the perineum. I left the woman one hour after the labor was over and she was then all right. I saw her three hours afterward, and found her very pale and restless. I was told there was no discharge of blood, and there was none on the diaper except a stain; but the woman lay on her left side, well over on her chest, and the diaper was fixed rather tightly from the perineum up to the pubes. The result of this was, that the blood was directed up onto the abdomen and filled the bed without appearing in the usual place.

The lesson this teaches is, always to insist upon women lying on their backs, and not to have any diaper brought up over the external genitals for at least twenty-four hours; let it be placed simply under them to catch the discharge.

I believe some of the cases of concealed post-partum hemorrhage were brought about by the women being allowed to lie on their sides. I believe, if you put a small pad over the pubes and a very tight binder, and let the woman lie well over on her left side, you will go a long way toward inducing concealed post-partum hemorrhage—just as you can produce retroflexion post-partum by keeping a woman on her back for three or four weeks with a hypogastric pad and a tight binder.

Post-partum Nausea. I have seen six cases where the most alarming symptoms have been caused simply by nausea, and in all cases free and thorough emptying of the stomach caused all the alarming symptoms to disappear. Two of the women had had chloroform and four had not.

All the confinements were natural. From about thirty minutes to one hour after delivery the symptoms set in, with a feeling of faintness, giddiness, loss of sight and general restlessness; no hemorrhage either external or intra-uterine. Stimulants were freely given both by mouth and hypodermically, but the symptoms persisted, and the state of the patient was most alarming until suddenly the stomach evacuated its contents—generally a very large amount—then immediate relief was experienced, and the dangerous symptoms disappeared. These cases are so alarming that I have known very experienced obstetricians utterly at a loss to account for the symptoms, and not at all disposed to think that nausea could produce such a condition.

Shock and Uterine Colic the Result of Vaginal Injections. I have seen several cases where women after their confinements have been doing very well until one day, when receiving a vaginal injection from the nurse, they have suddenly been seized with acute abdominal pain, shock and collapse, with several shivering fits. There has always been a distinct connection with the giving of the vaginal injection and the onset of the symptoms. In the majority of the cases all the symptoms have disappeared in twenty-four hours. I believe that the cause is the sudden distension of the uterus by a little fluid which has gained access to it. I do not think it is caused by fluid passing along the fallopian tubes, as the symptoms disappear so rapidly, and also because I produced exactly the same train of symptoms by letting a Barnes' bag distend in the cavity of the body of the uterus, where it had slipped from the cervical canal. In this case nothing could have passed along the tubes.

I have given up the use of vaginal injections post-partum, and have substituted the use of iodoform pessaries.

I may mention that Dr. Graily Hewitt has recently introduced glass tubes for vaginal and intra-uterine injections, especially prepared to allow a free return current by means of a deep groove on the sides of the tubes.

Bladder Cases. Everyone knows that retention of urine is a post-partum complication in some women; but I do not allude to the cases which we meet with usually, but to some bladder complications which, although uncommon, may yet occur to any of our patients.

First case, due to the bad habit of keeping a woman persistently on her left side. I was sent for one evening to see Mrs. B., who had been confined four days. She had great abdominal pain, a freely-fluctuating tumor in the middle line reaching from the umbilicus to the pubes, and a large solid tumor reaching

from the crest of the ilium up to her ribs on that side. I was told she passed her water "regularly."

The regular passage of water consisted in a more or less persistent dribble.

The cystic tumor disappeared on the passing of the catheter.

The solid tumor was the uterus, and when the woman was put on her back it assumed its proper position; and as she was allowed to remain on her back, and only had very slight pressure with her binder, there was no more trouble with the water.

The second case was rather puzzling; for although the medical attendant suspected bladder distension from the dribbling of urine, yet the evident enlargement of the abdomen was absolutely resonant in front. I found this was the case, but there was a freely-fluctuating abdominal tumor, dull at the sides, but resonant in front. A catheter removed two pints and a half of urine, and the cystic tumor disappeared. There was no doubt here—intestine fixed in front of the bladder.

The third case was an over-distended bladder containing two pints of urine; and yet this woman passed a half-pint of urine every six hours. I was asked to see her because she evidently had an increasing abdomen, with pain; and the bladder condition was not suspected, as the urine was passed apparently in a normal manner.—*Dr. A. E. A. Lawrence, Bristol Medico-Chirurgical Journal.*

CASE OF "ORBITAL ANEURISM" TREATED BY LIGATURE OF THE CAROTID. — A. W. Pritchard, M. R. C. S., Surgeon to the Bristol Royal Infirmary, writes (*Bristol Medico-Chirurgical Journal*):

In 1887 I recorded in the *Bristol Medico-Chirurgical Journal* a case of aneurism of the orbit, in which the symptoms were very much ameliorated by ligature of the carotid. That patient is still alive, and suffers very little inconvenience from the slight noise which he still hears in his head, and which sound is easily audible to any one applying a stethoscope to the temporal region on the affected side. I now bring forward another case.

J. M., a short, spare man of thirty, but who looks considerably older, came under my care last November with the following history: On September 10th, last, while at work at Mr. Christopher Thomas' soap works, he fell from a stool and struck the back of his head. The fall stunned him, but he quickly came round; and although a small lump appeared behind the left ear, he was able to continue at work for the next two weeks. The small swelling went away with bathing; but a pain persisted.

Fifteen days after the fall he felt something snap just external to his left eye, and a whizzing noise began in his left ear. This noise, he says, gradually increased in intensity. He became very unwell just after the sound commenced, and had to stay in bed, complaining of weakness and nervousness, loss of appetite and considerable pain in the left side of the head, which was relieved by poultices.

He presented himself at the Bristol Eye Dispensary on November 9th, and complained of double vision. There was slight prominence of the left eyeball, and a difficulty in moving it; some swelling of the lids, and a good deal of conjunctival irritation. The retinal veins were distinctly full in comparison with those of the right eye, and there was a very slight pulsation of the globe. He suffered pain all along the left side of the head; and a bruit could be heard on the left side of the head and on the eye, this bruit then being loudest over the base of the mastoid.

He was given ten grains of iodide of potassium three times a day.

For two months I kept him under observation; and although the pain and annoyance to the patient of the sound in his head lessened, still the proptosis increased, and the bruit and pulsation became more marked, and a distinct thrill could be felt in the upper eyelid, and he became somewhat deaf in his left ear. Under these circumstances I took him into the infirmary, with a view to further proceedings.

On admission he was found to have good vision in both eyes; the movements of the eyeball tolerably free, but not in accordance with those of the other, the eyeball was advanced three eighths of an inch, and the conjunctiva inflamed. The veins of the left side of the face and temple were fuller than those of the right. The pupils were of the same size, but the movements of the iris sluggish on the affected side. The bruit was very loud and heard all over the head; louder on the left side, and loudest at a point on the forehead immediately over the center of the orbit. It was generally louder over the sinuses of the dura mater than on other parts of the skull. The bruit quite disappeared when the carotid artery on that side was compressed. There was no nerve-symptom. In the heart a presystolic murmur could be heard; the radial pulses were unequal in strength and time, the left being weaker. There was no abnormal temperature, and nothing wrong in the lungs, kidneys, or digestive organs.

As the patient was very much troubled by the unpleasant noise in his head, and urgent that something should be tried, and as the condition was certainly growing worse, on June

21st, after the usual consultation, I tied the left common carotid.

The wound healed very well, and the effect of the operation was in some respects satisfactory. The bruit returned in the evening after the operation, but lessened in a few days, and now, six weeks later, is very limited in its loudness and area, compared with what it was before. Moreover, the patient does not hear it himself; the deafness has gone; the protrusion of the globe is not so marked, and the conjunctivitis and the diplopia are both much better. He has occasionally a little pain in the side of the head.

This case was probably one in which a direct communication occurred between the carotid artery and the cavernous sinus. Though stunned by the fall, he was not taken really ill till he felt a snap inside his head a fortnight later; and then the distressing symptom began. Possibly by fracturing or jarring the petrous portion of the temporal bone or the sphenoid just in front, the fall injured the carotid in or close to the cavernous sinus, and the snap occurred when the injured vessel gave way. The stream of arterial blood poured into the sinus would greatly interfere with the return from the large ophthalmic vein, which is almost a direct continuation of the sinus, and so cause engorgement of all veins in the neighborhood of the orbit, and edema of the tissues, and so protrusion of the globe. Moreover, the thrill to be felt in the upper lid, and the pulsation, can not be easily explained in any other way than by the veins receiving an impulse directly through the communication between the artery and vein; and a strong proof that the sound is caused by such a communication lies in the fact that it could be heard most easily over any of the sinuses of the dura mater, and, therefore, has been conducted more by the blood in the sinuses than by the cranial bones. Also, I think that the partial success of the operation helps to prove that this view of the condition of things is the correct one; for by diminishing the amount of blood sent into the sinus by the artery, the ligature of the carotid ameliorated all symptoms, but the freedom of the collateral circulation prevented the wound between the artery and vein from quite closing.

The result is not perfect: but I found that by compressing the other carotid I could quite stop the bruit; and if the patient at any subsequent time gets worse, I shall put before him the question of repeating the operation on the other side.

On May 15th, when this paper was in the printer's hands, I received information of the death of my patient. He was at work on the morning of May 15th, and came

home at dinner time, and died suddenly. Next day I made a *post-mortem* examination, assisted by Mr. Omerod and Mr. Pitt, and found both lateral ventricles and the fourth ventricle full of blood; this was doubtless the cause of death.

On examining the middle fossa of the base of the skull, we found a united fracture of the petrous portion of the left temporal bone running up toward the cavernous sinus. On passing a probe down the artery, where it had been cut from the circle of Willis in removing the brain, we could see the probe in the artery through two rounded holes in the wall of the sinus.

PALPABLE KIDNEYS.—Kuttner (*Berliner Klin. Woch.*) has four papers on "palpable kidneys." He distinguishes four principal forms in which those organs are accessible to bi manual palpation.

1. The kidney shows a clearly demonstrable respiratory mobility with unimportant amount of displacement.

2. Or it shows a dislocation of the first degree, that is, $\frac{1}{3}$, $\frac{1}{2}$, or $\frac{2}{3}$ of the organ can be felt; it is mostly mobile during the respiratory act, can be pushed out of place by the hands, and is dislocated, more or less, forward.

3. Or it shows a dislocation of the second degree; the kidney can be felt in all its extent, is easily pushed about, moves with respiration, lies near the anterior belly-wall, or can easily be brought thither.

4. Or the kidney is dislocated and fixed in its abnormal position.

Many of such dislocated and fixed kidneys are congenital and of slight clinical importance, but often this condition is acquired when a mobile dislocated kidney becomes fixed by the development of local inflammatory processes. To understand how one degree can be evolved from the other, it is requisite to have a clear view of the etiological moments which condition the origination of palpable kidneys.

In the first line we have to take into account the factors which are in a position to loosen or destroy the connections of the kidneys, and so bring them into other than normal relations to neighboring organs.

A few authors suppose that the disappearance of the fat of the capsula adiposa renis is a likely cause. Experience agrees with this view; movable kidneys are frequently met with in the progress of diseases attended by a general loss of fat, as in phthisis, carcinoma, etc., or in acute diseases with high fever, as in typhoid, malaria, etc. Should the fat of the adipose capsule disappear, and be replaced by a slack, wide-meshed connective tissue, the kidney loses its firm sup-

port and sinks downward by reason of its weight. The tolerably equable pressure it formerly exercised on the peritoneum becomes one-sided and downward, the elastic peritoneum yields and stretches; a sort of renal mesentery is thus gradually formed, and allows the organ to make similar excursions to those we see normally in organs furnished with a lengthy mesentery. To complete this condition time is required. In proportion as the fat of the adipose capsule vanishes, and the kidney assumes a lower position, its respiratory excursions increase in extent and become more and more accessible to the palpating fingers. While the kidneys sink downward, they recede gradually from the direct influence of the diaphragmatic contractions, and on the right side become affected by the respiratory depression of the liver, which still further continues the dislocation downward. Perhaps this is one reason why right-sided movable kidney occurs most frequently.

As Cruveilhier has pointed out, tight lacing is also a powerful factor in the production of floating kidneys.

Of not so much importance, in the author's opinion, are frequent pregnancies, abortions, pendulous abdomen, and the supposed causation of hyperemic swelling of the kidneys occasioned by menstruation (as consequence of the connections between the plexus ovaricus and plexus renalis) as has been asserted by several authors. Occupation, the doing of hard work or none at all, does not seem to have any influence on the production of movable kidney. Traumatism, such as falls, blows, gymnastic exercises, etc., have also been credited with bringing about this condition. Probably the mobile kidney was present before the accident which was supposed to originate it had happened.

All that has been advanced as causal does not explain the floating kidneys of children and young girls. All the causes cited can only be "opportunity causes" which lead up to movable kidneys or make movable ones more mobile only in a certain predisposition, but of themselves are not able to remove a kidney from its normal place permanently or temporarily, and give to it a certain amount of mobility.

The frequency of this condition, which was once considered an anatomical curiosity, is much greater among women than men. Out of 667 cases tabulated from various authors, 584 occurred in females and 83 in males. It may happen at any age, the greatest number of cases happening from thirty to forty years. It occurs oftenest on the right side; out of 727 cases, 553 were right, 81 left-sided, and in 93 both organs were affected.

If the causes of *ren mobilis* are obscure, so

also the complex of symptoms occasioned by it are uncertain and doubtful. Sometimes no inconvenience is felt; at others pains of a dragging, pinching, and boring character are complained of, limited to the affected side or radiating to the other, or to the loins, and between the shoulder blades; they are paroxysmal, brought on by slight exertions, or may take on the form of neuralgia, especially sciatic and intercostal. The annoyances increase during menstruation. Many patients are highly nervous, hysterical, and hypochondriac. The urine is sometimes albuminous and (rarely) bloody. Disturbances of digestion are more frequent; but it is doubtful whether the relation is causal or mere coincidence. Constipation may be caused by the mechanical pressure of the displaced kidney. The occurrence of icterus is explicable by mechanical functional disturbances of the gall-bladder, but the author has never seen this complication in any of his cases.

Patients with movable kidney are subject to sudden attacks of abdominal pain, feeling of anguish, vertigo, vomiting, and fever. The cause of this has by some been attributed to strangulation of the kidney in the surrounding connective tissue and peritoneum, giving rise to a more or less circumscribed peritonitis; others blame torsion of the renal vessels, especially the veins, and consequent acute congestion; others attribute it to intermittent hydro-nephrosis.

Slighter urinary disturbances are relatively frequent, colicky pains during micturition, frequent desire to urinate, and slight polyuria; these are generally unimportant and transient.

As authors differ about the etiology and symptomatology of this disorder, so they deviate from each other as to its cure. Some see the only possible cure of *ren mobilis* in its extirpation, some in nephrorraphy, and others object to all operative interference. The author would limit himself to nephrorraphy in the very worst cases threatening life and destroying all comfort. Properly constructed bandages are useful, and most in cases accompanied by pendulous abdomen. The author describes one he has found helpful. Narcotics and narcotic salves, poultices, and so on, may be needed for the pains, and the stomach disturbances must be treated specially.—*Edin. Med. Journal.*

SALICYLIC ACID IN DERMATOLOGY.—The germicide properties of this well-known agent have been carefully determined. Sternberg found that a pus micrococcus in active growth was destroyed by a two-per-cent solution of the acid, and that the bacterium termo was killed by a like solution. As unusual skill and care is needed for the preparation of the pure

acid, many samples to be had from druggists are unsatisfactory in their action on the skin, chiefly on account of the presence of carbolic acid.

The action of pure salicylic acid upon the skin is quite peculiar. When a plaster or ointment containing from thirty-eight to fifty per cent of salicylic acid has been applied, the epidermis beneath it becomes gradually white and soft, so that it may be scraped off with the back of a knife. A reddened oozing surface is exposed, upon which, by the aid of a lens, the papillæ, rich in vessels and nerves, may be seen projecting like so many carrots planted irregularly, with their roots up. Very little or no dermatitis is excited in the parts surrounding the application, except in cases of peculiar idiosyncrasy.

In the Johns Hopkins Hospital Bulletin, April, 1890, Dr. Morison calls attention to these facts concerning salicylic acid, and mentions certain cases in which he has found it of value. He first saw it used at a clinic at Prague in 1882, and found it in respect to cleanliness to greatly surpass, and in efficiency to equal the ill-smelling tar preparations of the Vienna clinics. He uses it now quite extensively in his practice.

It is a good remedy for freckles and other pigmentations, as it really removes these blemishes, and, in his experience, never of itself causes deposit of pigment. Through its germicide properties it quickly destroys the growths of *tinea versicolor* and ringworm. A case of chronic and very obstinate ringworm of the face and arm is cited, in which each spot was washed for five minutes with *sapo viridis* and warm water, and then covered with a solution of bichloride fifteen grains and salicylic acid sixty grains in an ounce of collodion. There was intense pain and slight blistering, but no further application was required except lanolin containing five per cent of salicylic acid. The cure was very remarkable.

Chronic eczema yields readily to the stronger salicylic preparations. In one case, a healthy man of forty-five years consulted him concerning a chronic squamous eczema of the wrist and palm. It worried the patient very much especially when he became warm in bed, and had for two years resisted all treatment. A thirty-eight-per cent salicylic acid plaster was applied and fastened tightly to the affected parts by means of a bandage. As the skin was not much affected, after twenty-four hours a fresh plaster was put on. This application, unlike the former one, caused intense pain, and upon its removal, next day, the epidermis was found to be soft and white. Without disturbance of the dead epidermis, a fifty-per-cent ointment

of salicylic acid in lanolin was rubbed in frequently and kept on by gloves. In from seven to ten days a complete cure was produced. The patient was discharged with orders to rub a little of the five-per-cent ointment on the parts which had been diseased every time he washed with soap and water.

The salicylic acid treatment is of great value in psoriasis of long standing. A case is related in which a man had suffered for twenty years from psoriasis numulata et orbicularis, having large spots on the forehead and on both sides of the nose. *Sapo viridis* and hot water were used to remove the scales, and an ointment containing sixty grains of salicylic acid to the ounce of lanolin was rubbed into the affected skin. In a week considerable improvement was noticed, and at the end of a month only a slight discoloration could be observed on the face which had once been greatly disfigured, and the lesions on the other parts of the body were also disappearing.

Salicylic acid may be applied in several different ways. It is only slightly soluble in water, but dissolves more readily in this liquid when sodium bichlorate is added. When it is desirable to apply it in powder to the skin, Dr. Morison prefers to make a saturated solution in alcohol, which dissolves it readily, and to allow the alcohol to evaporate, leaving the acid behind in the form of a very finely divided powder. Unna rubs the powdered salicylic acid up with gelatine and glycerine, no solution being formed, but a useful mixture. Ointments of various strengths may be similarly prepared with lanolin. Unna has prepared plasters containing from five to fifty per cent of salicylic acid, which have rubber backs and stick well to the skin.—*Maryland Medical Journal*.

SYMPATHETIC OPHTHALMITIS.—Although sympathetic ophthalmitis is most disastrous in its results and little amenable to treatment, the uncertainty whether it will in any given case result from an injury capable of producing it often makes a surgeon hesitate to urge that which has hitherto been considered the only certain preventive, namely, enucleation of the injured eye; and this is especially the case when the injury is not of such a nature as entirely to destroy vision. When vision has been obviously rendered impossible in the injured eye, enucleation is the almost universal practice in this country.

During the last decade much more definite views have obtained as to the pathology of sympathetic affections, and the theory that true sympathetic inflammation is of septic origin, and due to the transmission of microbes

to the second eye through the lymph spaces of the optic nerve and chiasma, has been very generally accepted, but there does not appear to have been any corresponding change in practice. Indeed, it seemed that modern pathology had but indorsed the ancient practice which had been arrived at empirically, for if the injured eye formed a nidus for the propagation of these nefarious micro-organisms, surely the reasons for its removal at the earliest possible moment were the more cogent.

M. Abadie, however, in a paper in the current number of the *Annales d'Oculistique* maintains that the propagating power of the microbes may be destroyed within the eye, and the necessity for enucleation thus avoided. It is not unlikely that in France these views will obtain wide acceptance, for there has always existed there a much greater prejudice against enucleation than in this country; a shrunken, misshapen and repulsive-looking organ generally being preferred to an empty socket. This may in part be due to the fact that French surgeons do not hesitate to allow an artificial eye to be worn over such a stump, while in this country such a proceeding has generally been considered likely to excite sympathetic trouble in the other eye. It is beyond the scope of this article to inquire how far the recognition of the distinction between sympathetic neurosis and ophthalmitis call for a reconsideration of this view.

The plan proposed by Mr. Abadie is, when the case is seen early, to cauterize the wound very freely with the galvano cautery, and to dress it antiseptically. If the case is seen later, when inflammation has already been set up in the injured eye, presumably by germination of microbes, he proposes to sterilize the eye by injecting into it a few drops of solution of corrosive sublimate (1 in 1,000). This sets up a rather severe irritation, and he believes that it destroys the propagating power of the microbes; in fact, he appears to consider it as efficient a safeguard as excision, and when the second eye has become affected he adopts a similar treatment for it, but is careful to inject an exceedingly minute quantity.

We much doubt whether these views will be confirmed by a wider experience. There can, of course, be no doubt as to the advisability of a thoroughly antiseptic treatment of recent perforating wounds of the globe, and it is almost certain that if applied sufficiently early it would prevent the occurrence of sympathetic inflammation; but when germs have already entered and inflammation has been excited, it is difficult to believe that any agent which does not totally destroy the tissues may be absolutely relied upon to sterilize them; and if the in-

jured eye has been destroyed, we ought not to rest content with placing the other eye in a condition of comparative safety only when we possess in immediate enucleation the means of rendering it absolutely secure. If the patient refuses his consent to enucleation, eversion, with antiseptic irrigation of the scleral cavity, probably stands next in point of safety, and some would put it on a par with enucleation; while if Mr. Mule's modification of introducing a glass sphere be adopted, a cosmetic effect may be obtained which, on an average, would probably be as good as or better than that which would result from retaining a shrunken globe. Resection of the optic nerve has also been proposed as a substitute for enucleation, and has recently been rather warmly advocated in some quarters.—*British Medical Journal*.

TRICHOMYCOSIS NODOSA.—Dr. Glasgow Paterson has investigated this condition anew, and claims to be the first to prove a bacillary origin. The affection seems peculiar to the hair of the armpits and scrotum. The hairs, to the naked eye, present an abnormally dry and dull appearance, and feel rough and knotted to the touch. Examined by a lens, the roughness is seen to be due to the projection from the sides of the shaft of numerous very minute concretions, which may assume either of two forms, a diffuse or a nodular. The diffuse form may extend along the shaft for nearly its whole length, with very narrow intervals of healthy hair; while the nodular form consists of small rounded masses, generally most thickly placed on the outer third of the hair, with longer intervening healthy intervals. The masses are firmly adherent, can not be removed by forcible rubbing, and can only be scraped off with great difficulty and injury to the hair. Under no circumstances does the disease penetrate into the hair follicle, and in scrapings from the skin of the axilla and scrotum no bacteria were found in the epidermal scales. The bacilli lie altogether in the cortex of the shaft, and do not penetrate deeply into the substance of the hair. The maceration caused by the moist warmth of those parts, where alone the affection is found, loosens the epidermal scales and allows an entrance to be effected underneath. There is a hard homogeneous or slightly granular material formed similar to that with which the pediculi fasten their ova to the hair, which forms the nodes and encapsules the bacteria. It is extremely hard, insoluble in most reagents, is of a pale yellowish color, stains dark brown with iodine, and deep purple with methyl-violet. The bacilli are short fine rods with slightly rounded ends, about two or three times as long as broad, and about one fourth the diameter of

a red blood corpuscle. They are non-motile, and so far cultivation experiments have failed. In all the cases examined, amounting to ten, the same distinguishing characteristics were present—the hard, insoluble nodes, the splitting and rupture of the cortical fibers, the burrowed and worm-eaten surface, and the colonies of fine rod-shaped bacteria. Dr. Patteson gives a table showing the difference between four nodose conditions of the hair, viz., (1) trichomycosis nodularis (Juhel-Renoy) or piedra; (2) trichomycosis nodosa (Patteson); (3) trichorrhexis nodosa (Kaposi); and (4) nodose hairs (Walter G. Smith). These latter, he says, possess no abnormal brittleness, but this is contrary to the statements made by other observers, for while in trichorrhexis nodosa the fracture occurs *through* a node, in nodose hairs it takes place *between* these. Dr. Patteson also omits to mention whether in any of his cases the phenomenon of red sweat was observed. In association with this, nodes resembling those found by Dr. Patteson have been found, and in them bacteria resembling the bacterium prodigiosum.—*Edin. Med. Journal*.

KELOID.—Leloir and Vidal have contributed some interesting facts to our previous knowledge of keloid. They describe the spontaneous and the cicatricial forms, and add what has been often confused with these, an account of hypertrophic scars. In spontaneous keloid the number of the individual growths is sometimes very great. Thus, in a case observed by Amicis there were 318, the greater number spontaneous, but a certain portion secondary or cicatricial. They were arranged nearly symmetrically, and were most numerous on the arms. Examined microscopically, the epidermis and its interpapillary cones preserve their normal aspect. Keloid, unlike cicatricial tissue, arises in the corium, up to that time intact, and is, consequently, not a formation destined to repair a loss of substance. The persistence of the interpapillary cones and of the papillæ is not met with in the secondary or cicatricial keloid, and is limited exclusively or nearly so to the true or spontaneous form. The authors, after careful examination, have not been able to find any alteration in the nerve filaments or to discover the smallest microbe. Cicatricial or secondary keloid is that which is developed in the thickness of a scar. It begins below the cicatricial neoplasm or at a point in its margin, but the ultimate growth has no connection with the extent of the scar in which it has arisen. Kaposi has stated that the hypertrophic scar closely resembles keloid, but the authors do not accept this view. An hypertrophic scar is usually redder, more vascular, and not so hard

as keloid. The latter, once removed, recurs almost constantly in the cicatrix left after the operation, or in the course of the stitches; excision of hypertrophied scars cures them completely, or they may spontaneously disappear. The authors have seen two instances of recent cicatricial keloid cured under the continued and regular application of mercurial plaster. The true keloid, they find, is best treated by repeated scarifications carried nearly as deep as the growth, and not more than two or three millimeters beyond its margin. These must be continued till there is an uniformly pliant and thin cicatrix. Should a nodule of induration not larger than a pin's head remain, this little by little enlarges, and the neoplasm recurs. The scarifications are to be two millimeters apart, and crossed at right angles. The pain can be much lessened by painting the part once or oftener with the chloride of methylene.—*Ibid*.

A PRELIMINARY TREATMENT OF LUPUS VULGARIS.—Dr. Brooke, of Manchester, notes that there are two circumstances which induce patients suffering from lupus vulgaris to permit the growth to progress untreated. One its chronicity and painlessness, which tend to blind them to its disastrous consequences; the other the imperfect results which follow scraping, when this has been followed by some indifferent ointment, under cover of which the disease has partly reformed. He has therefore found it useful to institute some preliminary treatment. As the avoidance of irritation is of the greatest importance in a prolonged treatment, some formula fulfilling this end must be employed. The one he finds most suitable is as follows:

Hydrarg. oleat. (2½%–5%).....	3j.
Acidi salicylici.....	gr. 10–15.
Ichthyolis.	℥xv.
Ol. lavandulæ.	q. suff.

The keratolytic action of the salicylic acid must not be pushed. The ichthyol was added with the object of incorporating a mild antiphlogistic, and also as a means of toning down any excessive activity of the other drugs. Dr. Brooke had previously noticed this mitigating influence when ichthyol was added to biting or irritating substances. In using this formula it is better to begin with the lower doses and increase gradually. One important point which must be impressed on the patient is, *that the skin must not be broken by the application*. Should it become sore and threaten to break, the ointment must be at once diluted with pure lard. Should it break, the sores must be healed by the use of a zinc and carbolic ointment. Inunction is the

best mode of using the ointment. The longer the rubbing is continued the better, as twenty minutes in the morning and ten in the evening in cases where the face, for example, is extensively affected. If the hands are the parts attacked, gloves should be worn; but on the other parts dressings may be dispensed with. This treatment has been most successful in cases which have never been operated on, but it is of use in relapses after previous scrapings. It has the following advantages: (1) It considerably reduces the field in which operation is necessary; (2) it involves no pain; (3) it requires, in most cases, no suspension from work or of ordinary habits. When it has done all that it is capable of, the remaining spots may be treated by the cautery, caustic point, plaster, etc.—*British Journal of Dermatology*.

RESORCIN IN EPITHELIOMA OF THE FACE.—Dr. Mario Luciani reports two cases of "cutaneous epithelioma" in which he claims to have effected a complete cure by the application of an ointment containing resorcin. In one case the patient, a healthy woman, aged fifty-five, had had a small red nodule on the forehead for four years. It then began to grow larger and became ulcerated, the ulcer having hard borders and a foul base, and being very painful. As the disease was spreading and the patient would not hear of any thing in the nature of a surgical operation, Dr. Luciani directed that an ointment composed of thirty grams of resorcin to one hundred grams of vaseline should be applied once a day to the ulcerated surface after previous cleansing with a two-per-cent watery solution of borax. In a month the ulcer assumed a healthy appearance, its edges softened, and the burning and shooting pain formerly complained of ceased. After three months' further continuance of the treatment, the ulcer completely healed. The second patient was a woman aged sixty, who for about a year had noticed a small lump on her upper lip near the corner of the mouth on the right side. Ulceration took place, and the course of events was similar to that in the previous case. The same treatment was followed by an equally as happy result. While Dr. Luciani is to be congratulated on his success, some doubt may, perhaps, in the absence of microscopic or other conclusive evidence, be expressed as to the true nature of the disease with which he had to deal.—*British Medical Journal*.

FRACTURES IN LUNATICS.—An inquest was held on Friday, July 4th, on the body of Christopher O'Conner, who died in the Richmond District Lunatic Asylum two days pre-

viously. The deceased had only been a patient for a few weeks, and was suffering from violent mania. He had been a gate porter at the Convict Lunatic Asylum at Dundrum. At a *post-mortem* examination it was found that the deceased had four fractured ribs, two being broken in two places, and driven into the lung, in which there was an abscess. Both great toes had the "middle" bone broken, and there were abscesses connected with these fractures. The medical evidence given went to show that the deceased was not subjected to any ill-usage in the asylum, that he had been very violent before admission, and that in general paralysis of the insane bones sometimes broke without external violence. The jury found that the injuries were caused by violence, but that there was no evidence to show how it was inflicted. *Ibid*.

ETHER AS AN INTOXICANT.—The Government propose to appoint a select committee to inquire into the adulteration of British and foreign spirits, and to report as to how far it would be possible to apply the Merchandise Marks Act and the Sale of Food and Drugs Act to the concoctions that pass for spirits. Mr. T. W. Russell proposes to add a rider to the Government motion, that it be an instruction to the committee to inquire into the sale and consumption of ether as an intoxicant in certain parts of Ireland. The consumption has, it is stated, reached alarming proportions in the counties of Derry and Tyrone. On market day the streets of some of the towns and villages are said to smell of ether. The Chancellor of the Exchequer has expressed his willingness to accept the proposed rider.—*Ibid*.

THE LIVER IN DIABETES.—M. Frantz Glenard has recently been contributing to the *Lyon Medical* a series of papers on the condition of the liver in diabetes. His conclusions are founded on the systematic examination of 324 diabetic patients (234 men and 90 women) observed in private practice at Vichy; he found some manifest alteration in the liver in no less than sixty per cent of his cases. Hypertrophy was the change most frequently observed; it was present in 34.5 per cent; in 23 per cent there was indolent induration of the liver. He believes that he has been able to trace a regular series of changes—hypertrophy being followed by shrinking, in some cases by atrophy, and in any case leaving a liability to fresh attacks. The most characteristic point about the hypertrophy appears to be that it is generally limited to the right lobe.—*Ibid*.

The American Practitioner and News

"NEC TENUI PENNÂ."

Vol. X. SATURDAY, AUGUST 30, 1890. No. 5.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

After something more than a decade this medical giant of the West will revisit Louisville. Its peripatetic feats and local deliverances since that day give warrant to the expectation that the society will return to us enlarged in mind, body, and estate.

According to the estimate of the energetic chairman of the Committee of Arrangements, Dr. I. N. Bloom, the meeting promises to be large in point of numbers and more than representative in point of talent. Besides the regular membership, which numbers some of our most brilliant western lights, the following men of mark have consented to honor the meeting with their presence: John A. Wyeth, of New York, a Kentuckian, a graduate of the University of Louisville and a surgeon and writer of national reputation, who will deliver a special address; W. W. Dawson, of Cincinnati, ex-president of the American Medical Association; W. T. Briggs, of Nashville, president elect of the American Medical Association; W. T. Belfield, of Chicago; E. A. Wood and Stansbury Sutton, of Pittsburgh; Dr. Murdock, president of the Association of Railway Surgeons, United States; Willis P. King, of Kansas City, the hu-

morist of the profession; H. A. Hare, editor of the Philadelphia Medical News; Frank Woodbury and W. H. Pancoast, of Philadelphia; H. O. Walker, of Detroit; X. C. Scott, of Cleveland; W. H. Daly, of Pittsburgh; Frank Lydston, of Chicago; W. C. Wile, of Danbury, Conn.; John H. Hollister, editor of the Journal of the American Medical Association, and others. These men are not coming merely to have a good time, but will add learning, wit, and zest to the proceedings.

Reduced hotel and railroad rates have been secured, and a large and attractive programme has been arranged.

Besides these features there is to be an exhibition of chemical and pharmaceutical preparations, and surgical instruments and appliances upon a magnificent scale.

In the way of cheer it has transpired that an excursion by moonlight on *La Belle Riviere* and a banquet in old Kentucky style will be given the visitors by the profession of the city, while not a few of our non-medical citizens will take a hand in making them feel at home.

With such promises, and such facilities as Louisville possesses for making them good, it goes without the saying that the meeting will be a scientific and social event in the history of this eventful Association.

The meeting is advertised to take place next October 8th, 9th, and 10th.

THE CLOSE OF THE INTERNATIONAL MEDICAL CONGRESS.

The later reports from the International Medical Congress confirm the earlier announcements that it was one of the most noted gatherings of eminent men in the world's history.

As might have been expected there was more or less friction and dissatisfaction, for it is not among human possibilities that so vast an undertaking could be carried out without the failure to anticipate some of the almost infinite complications that might arise.

Thus the foreigners complained that the Germans failed to listen when their papers were read, and it is even said that Dr. Lassar, whose herculean task almost unsettled his

mind, has had to flee to New York for respite from the storm of censure raised by his supposed short-comings in the management of the offices intrusted to his care.

But after a sober second thought the verdict must be unanimous that the Berlin International Congress has surpassed all predecessors in every respect that makes up a great conference.

It is curious to observe that the two names that towered above all others, and which could not be mentioned except to elicit stormy applause, were those of men whose chief eminence is in the field of pathology, viz., Virchow and Paget.

It is further to be observed also, that both these men, especially the former, are not a little engaged in public affairs as well. It is said that the pronunciation of the name Virchow acted like a spell on the vast audience whenever it was called, eliciting always cheers and other expressions of the regard in which he is everywhere held.

The next meeting will be held in Rome in 1893; and while it is doubtful if the magnitude of the Berlin meeting will soon be surpassed, it can hardly be doubted that each succeeding Congress will address itself more and more to the purposes for which such an organization is properly designed.

Notes and Queries.

A REVIEW OF PRESCRIPTIONS AND PRESCRIPTION WRITERS.—The compounding of prescriptions, while the most important, is essentially the scientific part of pharmacy. It raises pharmacy above the level of a trade to the rank of the learned professions. The prescription druggist stands shoulder to shoulder with the physician in having for a life work the restoration of the afflicted and the prevention of disease. He is the watchful sentinel between the afflicted and the careless, incompetent, the overworked, or perhaps the ignorant ministers to public ills.

While a mistake is perhaps excusable in the doctor, it is unpardonable in the pharmacist. Should the physician make a mistake, there is a good chance for its correction at the hands of

the druggist; but should the compounder be at fault, there is no redress. He must follow the instructions of the physician to the smallest detail, unless there is a manifest error; if such should occur he must consult the prescriber and have it corrected without the customer's becoming aware of the difficulty. The doctor has the right to specify any manufacturers' preparations he may prefer, and he often exercises his privilege of sending your best customers to another pharmacy.

The average prescription, thanks to the literary and medical attainments of the average practitioner, is easily compounded. Its beautifully turned and gracefully curved letters and symbols, while unfathomable and mystic to the unscientific, are to the pharmacist as an open, printed page; and if it does not contain iodoform or valerianate of ammonia, its compounding is a pleasant undertaking.

We are speaking of the average prescription, however; sometimes we find one much below the average, that appears to be an instantaneous photograph of a flash of lightning or a map of a jack rabbit's ramble through the sage brush. We view it from all sides, turn it upside down, follow its intricate windings, its omissions and its commissions, until we master its contents. Occasionally a genteel prescription will present itself, with a most placid and benign look upon its countenance; it will proceed to mix quinine, aromatic sulphuric acid, and syrup together, and then will have the unsuspecting mixer add a few drops of compound tincture of iodine. A dark cloud forms in the solution and on the anxious brow of the chemist, which no amount of shaking will dispel. Sometimes antipyrine or a weak iodide is mixed with sweet spirits of niter, and the solution is colored with the pale cast of aniline, or the beautiful reactionary color of iodine comes forth. At times a pill mass is presented containing a substance like dried sulphate of iron, and an unwise choice of an excipient causes the mass to set with the firmness and tenacity of well tempered mortar in a stone wall.

We might enumerate some of the terrific and fatal explosions which we see reported from time to time in our journals, to illustrate the results of what is known to the pharmacist as

prescription difficulties, but the infrequency of such occurrences prove that such prescriptions are rare, or else that the average druggist is wide awake and up to snuff.

In a country drug store, where the prescriptions of a few doctors are dispensed, there is less diversity in the character and composition of prescriptions than in a city pharmacy.

To give this paper practical value, we have spent a few hours tabulating and classifying 1,000 receipts taken at random from the file of a small pharmacy in the suburbs. Sixty-nine doctors of all schools have contributed specimens of their handiwork to the collection. Pharmaceutically considered, they are divided as follows:

Liquids, consisting of solutions, mixtures and emulsions, 592; powders, 156; pill masses and powders in capsules, 135; pills, 25; ointments and cerates, 33; suppositories, 29; plasters, 15; miscellaneous, 15; articles prescribed, 3,437; remedies, 269; quinine is called for, 233; opium, 90; ipecacuanha, 73; morphine, 72; antipyrine, 66; paregoric, 58, and so on down. Simple syrup is used 295 times; elixir simplex, 125; elixir adjuvans, 14.

Of the medicated syrups, tolu leads, 55; ipecac, 44; scillæ, 35; wild cherry, 30; licorice, 30; scillæ comp., 14. Tonics seem to be in demand in this locality, over half of the prescriptions being of that nature. Remedies to ease pain come next. Opiates aggregate 233; chloral, 24; chloroform, 28; ether sulph., 4; chloranodyne, 10; potassium bromide is called for 42 times; other bromides, 23; cathartics are in slight demand; podophyllin is prescribed 20; mercurials are used principally as alteratives; leptandrin is used 14 times; rhubarb, 19; cascara sagrada, 13; blue mass, 4 times. Among the alteratives mild chloride of mercury is used 37 times; corrosive chloride, 13; iodide of potassium, 34; other iodides, 7. Iron in some form is used 60 times.

In the new remedies we find salol, 10; sulphonal, 4; phenacetin, 4; antifebrin, 1; saccharine, 2; ichthyol, 1. Active poisons appear in small ratio: aconite, 45; belladonna, 34; hyoscyamus, 13; arsenic, 13; strychnia, 9; aconitia, 1; atropia, 4; phosphorus, 2; carbolic acid is dispensed 34 times; iodine, 14; iodo-

form, 11. As digestives pepsin is used 35; manufacturers specified, 16; pancreatin, 16. Antacids: sodium bicarb. is called for 36 times; proprietary articles, such as lactopeptin, viburum comp., listerine, and others, are called for 35 times. For ointments vaseline seems to be the most popular base, having been used 15 times; lanolin, 2; basilicon ointment, 5; ung. aqua rosæ, 2; lard, 9.

Viewed from a pharmaceutical standpoint, these prescriptions will compare well, I am sure, with any similar number of receipts to be found in any pharmacy on the globe. The absence of the typical shot-gun prescription is particularly noticeable.

There is little tendency to poly-pharmacy in this section, and there is also a marked predilection to prescribe small quantities, 2, 4, and 6 oz. bottles being generally called for, and usually 12 to 20 powders and capsules. I do not think that the same number of prescriptions from so large a number of physicians can be found in any other locality which will make a better showing for professional proficiency. To account for this I would suggest that this is largely due to the fact that our physicians are, as a rule, young men; they have the western push and vim to keep up with the times, and are, in fact, the most enterprising representatives of graduates from our medical centers. I trust that at our next meeting we may have many tabulated reports upon this subject from all sections of the State. I thank you, gentlemen, for your kind attention.—*From an address by Dr. W. I. Cottel, Pacific Drug Review.*

SULPHUROUS DISINFECTION.—The following letter, by Dr. Henry B. Baker, Secretary of the Michigan State Board of Health, to E. B. Frazer, M. D., Secretary of the State Board of Health, Wilmington, Del., discusses an important hygienic problem:

Your letter of August 18th, acknowledging the receipt of a copy of my letter to Dr. Duffield (giving results of experience of health officers in Michigan, and an account of the experiments by Pasteur, Roux, Dujardin-Beaumont, and others relative to sulphurous disinfection), is before me. You ask me for further

opinion, and refer to the report of the Maine State Board of Health for 1889, page 251, and Dr. Mitchell Prudden's estimate of the want of value of sulphurous disinfection. (*American Journal of the Medical Sciences*, May, 1889, page 470.)

There are at least two valid objections to the acceptance of Dr. Prudden's conclusions to which you refer: (1) His experiments dealt with a micro-organism which seems to be different from the one most generally accepted as the probable cause of diphtheria. Therefore he may or may not have been dealing with a micro-organism causing diphtheria. (2) The quantity of sulphur burned, the strength of the sulphurous acid fumes which he employed, is not stated. It having been proved by actual experience with disease, and by other laboratory experimentors (Pasteur, Roux, Dujardin-Beaumetz, Vallin, Legouest, Polli, Pettenkofer, Dougall, Fatio, Pietra Santa) that sulphurous acid gas is not always a disinfectant when employed in small proportions, and that it is a disinfectant when employed in large proportions, such as result from the burning of three pounds of sulphur to each thousand cubic feet of air-space, no different conclusion should be reached from Dr. Prudden's experiments as published. (*American Journal of the Medical Sciences*, May, 1889, page 470.)

You mention that Dr. W. H. Welch, of Baltimore, "enters his protest" against disinfection by sulphurous acid gas. I respectfully submit that entering a protest should count for very little in science as against results of actual, practical experience in the restriction of diphtheria; it should not even take rank with definite statements of results of laboratory experiments.

Laboratory experiments are very valuable, but they need to be repeated by the same observer, and by other observers, in order to eliminate errors due to accidental and incidental conditions.

It is not easy to make laboratory experiments which shall conform to or correctly represent average conditions in actual outbreaks of disease. That is probably one reason for the discrepancies in laboratory experiments, and for the disagreement of some laboratory experi-

ments with practical experience with disease. One reason for this last disagreement may be that micro-organisms, which, after subjection to a disinfectant, may yet have sufficient vitality to reproduce in a laboratory, where the most favorable conditions are supplied, could not possibly do so in the human throat, or elsewhere in the human body, because of the well-known power of the fluids of the body to destroy micro-organisms, as proved by Dr. Prudden's and other laboratory experiments following, but not confirming, Metschnikoff's doctrine of the phagocytes.

Progress would be easier, more rapid, and the backward and forward movements less frequent if experimenters in laboratories would be more careful in stating the details of their work.

The interpretation of the results of laboratory experiments, and the determination of the bearing which they should have upon practical affairs, is an extremely difficult work, and one in which there is very great liability to error.

Practical health officers need to employ a gaseous disinfectant that shall at once reach all surfaces, ledges, cracks, drawers, and receptacles of dust wherever it may be in a room, that shall permeate all articles sufficiently permeable to admit disease-causing micro-organisms, that will not necessitate too much labor in the removal of furniture or other articles, and that shall have power to destroy or sufficiently weaken the vitality of the "germs" of such diseases as diphtheria and scarlet fever, and occasionally smallpox, as they are usually distributed in the sick-room, and that shall not destroy family portraits and similar articles. Only two such disinfectants are prominently before us for choice, chlorine and sulphurous acid gas. Of these two, sulphurous acid gas is made in proper quantity with more certainty and less trouble than is chlorine gas; and at present I regard the weight of evidence in its favor as equal to that relative to chlorine gas, concerning which not so much evidence has been published. Practical experience in Michigan proves that by isolation of first cases of diphtheria, and disinfection of premises after death or recovery therefrom, by fumes of burning sulphur, etc., four fifths of the cases and deaths which would otherwise occur from that

disease are prevented. If there is any other method of disinfection, or any other procedure that can be shown to reduce the cases and deaths more than the four fifths, and down to less than an average of two and one third cases and six tenths of one death to each outbreak, I am exceedingly desirous of knowing what it is. But, inasmuch as that is the recent experience in Michigan (outside of the great cities), it does not seem best to give up the methods employed until evidence of a better method is produced.

Meantime I would advise a continuance of sulphurous disinfection for the purposes for which it is applicable, and for which it is greatly needed as stated above, not including the disinfection of excretions from the patient, for which chlorinated lime or liquid is applicable, nor of bits of diphtheritic membrane which should be destroyed by fire, as should also all rags, and every thing else not too valuable used about a patient; and all clothing, bed-clothes, etc. that can profitably be boiled should be so treated.

THE MEDICO-LEGAL ASPECT OF ABDOMINAL SECTION.—The technique of abdominal operations has attained so high a degree of excellence that it would seem that little remains to be accomplished to render it absolutely perfect. Unfortunately the same can not be said of our diagnostic resources in conditions of disease within the abdomen, which are still far from being adequate. Every now and then we read of cases occurring in the practice of careful and skilled surgeons, where errors of diagnosis have led to the performance of abdominal operations attended sometimes with fatal results. If these errors have been made by men of acknowledged diagnostic ability, they are much more likely to occur in the practice of surgeons of less skill and experience.

It is therefore a matter of importance to determine how far the surgeon can be held responsible for these diagnostic errors, since the greed of attorneys and the avariciousness of the patient's relatives not infrequently place him in the disagreeable position of defendant in a civil or criminal law suit. At the last meeting of the American Medical Association

two interesting and instructive papers were read by Drs. Vanderveer and Wile, on the subject of the "Medico-Legal Aspect of Abdominal Section," which are reported in the Journal of the Association. Dr. Vanderveer states that in the trial of medical men for malpractice, charges to juries have been uniformly that gross neglect or gross ignorance, or both, must be shown on the part of the prosecution, beyond a reasonable doubt, before conviction can be had. It should be borne in mind, however, that it is impossible to make precise distinctions between negligence and ignorance and gross negligence and ignorance; for that which under some circumstances would be ordinary skill, in other circumstances would be ignorance, and still in other circumstances gross ignorance. The responsibility which the surgeon should assume in the class of cases under consideration is well stated in Dr. Wile's paper: "Laparotomy to-day is, in skillful hands, a recognized operation, and there are certain conditions of disease or accident which can be reached only through abdominal section. The surgeon must be certain as far as possible, from his diagnosis, that a given condition or conditions warranting exploration exist. He ought to be accurately informed as to the correct method of reaching the parts through operative interference. He should know just when the operation ought to be performed in order to obtain the best or safe results. Beyond this the responsibility lies with the patient or patient's friends. They should be informed of the danger of the disease as it exists unrelieved; they should be informed as to the gravity of the operation and its risks, and they should be warned that in the event of unfavorable result, either through failure of the vital powers to stand the shock, or from a too great extent of diseased parts to permit successful manipulation; or even in the case of a possible mistaken diagnosis, after sufficient consultation has been had, the doctor shall not be blamed."

It is an unfortunate fact that suits of malpractice against surgeons are tried before juries of laymen, who are unacquainted with the mere rudiments of the surgical art. Moreover the prosecution is frequently permitted to adduce, as expert testimony, the opinions of men

who have never performed a surgical operation of magnitude, and who are perfectly ignorant upon the subject on which they are asked to testify. The experts testifying in these cases should be appointed by the State, and selected from among men of acknowledged surgical skill and ability. By the adoption of some plan like this the accused party would be certain of a fair and impartial investigation of the points at issue. However comforting the reflection may appear, that the unjust decisions of juries are usually reversed by superior courts, it must not be forgotten that the accused surgeon has been subjected to a large expense and loss of time, not to leave out of consideration the anxiety and worry inseparable from every law suit. And we would heartily re-echo the sentiment expressed by Dr. Vanderveer, that the laws should be so modified that surgeons may have better protection in the recovery of time, for expenses they have been put to, when it is proved that the case was urged by some disreputable lawyer, or by those personally malignant, within or without the profession.—*International Journal of Surgery.*

IT WAS DIPHTHERIA THAT KILLED THEM IN MONTMORENCY AND OTSEGO COUNTIES.—The outbreak of dangerous disease which has prevailed in Otsego and Montmorency counties since last spring, and which local physicians said was not diphtheria, and permitted two of the corpses to be sent to Lapeer County, where a case of diphtheria occurred in a person who viewed the remains, has been investigated by the State Board of Health, the investigation having been requested by a union meeting of the boards of health of three townships in those counties. Prof. Vaughan, of the University, a member of the State Board of Health, went and made the investigation. He has also made bacteriological examination of the membrane from the throats of two of the patients, and has found and propagated the micro-organisms which are believed to cause diphtheria. This species of micro-organism is known as Löffler's bacillus. Prof. Vaughan says: "The bacilli have been compared with the Löffler bacillus, which I had obtained in the laboratory of Dr. Koch at Berlin, and the identity of the two

can not be questioned." He reports the disease to be unmistakably diphtheria, as proved by symptoms, physical signs, throat paralysis, etc., and the diagnosis is sustained by the bacteriological examination. It is now hoped and expected that the local authorities will take thorough measures and stamp out the disease.

HENRY B. BAKER.

LANSING, MICH., July 22, 1890.

Secretary.

A HINT FOR THE MICROSCOPICAL EXAMINATION OF URINE.—When attempting to examine urine under the microscope for casts, epithelial cells and other organic bodies, a good deal of annoyance and difficulty is sometimes caused by urates, and also, when the specimen is not quite fresh, by fermentation and putrefactive products. In order to obviate this difficulty, and with the further view of preserving the specimen, Dr. M. Wendringer advises that the urine should be mixed with a nearly saturated solution of borax and boracic acid. This dissolves the urates and keeps the urine from fermenting, and at the same time exercises no destructive effects upon the casts and epithelial elements which it is desired to examine. The solution is prepared by mixing twelve parts of powdered borax in one hundred parts of hot water, and then adding a similar quantity of boracic acid, stirring the mixture well. It is filtered while hot. On long standing, a small deposit crystallizes out, but clings to the side of the vessel, so that it does not interfere with the transparency of the liquid. The urine to be examined is put into a conical glass, and from a fifth to a third of its bulk of the boracic solution added to and agitated with it. The urine will be found to have become clear in a short time—i. e., if there is no cloudiness due to bacteria; and it will remain unchanged for several days. If it is only wanted to clear the urine and to make it keep for a day or two, the addition of a smaller quantity of the boracic solution is sufficient. If a third of its bulk is added, no fermentation or putrefactive processes take place, even if the glass is left uncovered in warm places. Albumin, too, if it exists, is not coagulated. The organic elements—as epithelial cells, casts, blood corpuscles, etc.—collect so quickly, without undergoing

any morphological change, at the bottom of the glass, that the first drop taken up by the pipette usually proves a satisfactory specimen.—*Lancet*.

WILLIAM KEMMLER, convicted of murder, was executed August 6th, in the State Prison at Auburn, New York, under the law, by the use of electricity. After the application of electricity had continued about 17 seconds, he was said to be dead, and the current was stopped. Signs of respiration appeared, however, and the current was again applied, and in about 13 minutes from the first stroke he was again declared dead. Death was then a certainty. The flesh upon the dead man's back was burned, and also a spot on the top of his head, where the electrodes had been placed. The autopsy was made three hours after death. All the physicians agreed that Kemmler must have lost consciousness at the first stroke.—*Medical and Surgical Reporter*.

THE AMERICAN RHINOLOGICAL ASSOCIATION will hold its eighth annual session at Louisville, Ky., October 6th, 7th, and 8th. All leading subjects relating to Nasal and Nasopharyngeal Diseases will be opened for discussion by a leading Fellow of the Association. The medical profession is cordially invited to attend. The secretary, Dr. R. S. Knode, Omaha, Nebraska, will furnish any information to physicians desiring to become members.

BEEF JUICE.—The attention of our readers is called to the advertisement of "Beef Juice," a new preparation of that enterprising and reliable firm, Messrs. John Wyeth & Bro. If what they claim for their Beef Juice is confirmed, it will certainly prove a boon to vast numbers of the sick and delicate. This house was the originator of "Beef, Iron, and Wine," which has given them a reputation the world over.

THE ASHEVILLE MEDICAL REVIEW is the name of a new monthly edited and published by Frank T. Meriwether, M. D., and H. Longstreet Taylor, A. M., M. D., Asheville, N. C., August 15, 1890. Terms: yearly subscription, \$2 in advance. We wish our friends all happiness and success in their new venture.

It is reported that J. M. Hirsh, a chemist of Chicago, in an interview, August 7th, claims that he has discovered a process by which he can extract aluminum from common clay, at a cost of fifteen cents or less per pound. He proposes to begin work within a few weeks, turning out 300 pounds daily from the start.

An epidemic was reported at Preston, Iowa, on August 7th, which is said to be of the nature of cholera. Later it proved to be a malignant type of dysentery. Eighteen deaths have occurred in as many days, but the epidemic was said, on August 9th, to have begun to abate.

The French Senate, on August 4th, voted 1000,000 francs for the establishment of frontier posts to prevent the entry of cholera into France.

DR. KOCH read before the Medical Congress in Berlin a paper in which he is said to have declared that he had discovered a way of killing the tuberculosis bacillus, and of curing tuberculous disease.

DR. BRIEGER, whose name is favorably known for his original work in bacteriology and general pathology, has been appointed Extraordinary Professor in the University of Berlin.

FRENCH lawyers say that the doctors have no legal right to make anatomical experiments on an executed criminal in opposition to his last wishes.

THE International Cremation Congress at Berlin has appointed a committee, consisting of members from the different countries represented at the Congress, for the purpose of furthering the movement for the cremation of the dead.

DR. WILLIAM LOMAX, of Mattoon, Ind., has given his entire estate, amounting to over \$100,000, to the Indiana Medical College, of Indianapolis, the only condition being the pay-

ment of a small annuity to Dr. Lomax and his wife, during their lives, and the reservation of their home to them.

THE Fourth Annual Meeting of the American Orthopedic Association will be held in Philadelphia, September 16, 17, and 18, 1890. A large and attractive programme has been prepared. The papers will be discussed by the following gentlemen:

Discussion upon Lateral Curvature, opened by Dr. Geo. W. Ryan.

Deformities of Spastic Paralysis, Dr. Roswell Park.

Amputation as an Orthopedic Measure, Dr. L. A. Sayre, Dr. A. J. Gillette.

Ready Method of Counter-traction at the Knee, Dr. R. H. Sayre.

Paralytic Club Foot, Dr. H. Hodgen.

Treatment of Infantile Club Foot Preliminary to Operation, Dr. J. C. Schaaps.

Ten Years' Experience in the Management of Knee-joint Disease, Dr. Joseph D. Bryant, Dr. George B. Packard.

Treatment of Hip Disease, Dr. J. E. Moore.

Value of Muscular Protection and the Limp of the First Stage of Hip Disease, Dr. C. C. Foster.

Joint Diseases, Dr. W. R. Whitehead.

Diseases of the Eye Associated with Spinal Caries, Dr. H. E. Goodman.

Prognosis of Pressure Paralysis, Dr. C. L. Scudder.

The Relief of Paraplegia, Dr. C. W. Stimson.

Lateral Deviation of the Spinal Column in Pott's Disease, Dr. Dillon Brown.

Posterior Rachitic Curvature of the Spine, Dr. E. G. Brackett.

Sacro-Iliac Disease, Dr. L. A. Weigel.

Instantaneous Photograph Illustrating the Gait of a Child from whom both Hips had been Removed, Dr. George S. Knickerbocker.

List of officers for 1890: President, DeForest Willard, M. D.; First Vice-President, A. J. Steele, M. D.; Second Vice-President, A. B. Judson, M. D.; Corresponding Secretary, Samuel Ketch, M. D.; Recording Secretary and Treasurer, George W. Ryan, M. D., 114 West Ninth Street, Cincinnati.

Membership Committee—Drs. Bradford, Lee, Gibney, Lovett, Weigel. Committee of Arrangements—Drs. Lee, Allis, and Young.

Members are invited to visit the Presbyterian Hospital, Thirty-ninth and Market streets; the Orthopedic Hospital, Seventeenth and Summer streets; University Hospital, Thirty-fourth and Spruce streets; Children's Hospital, Twenty-second, below Walnut Street; Pennsylvania Hospital, Eighth and Spruce streets; White Cripples' Home, Forty-fourth Street and Baltimore Avenue, and the Colored Cripples' Home, Forty-third and Wallace streets.

SPECIAL NOTICES.

CHAS. A. RILEY, M. D., Rockville, Mo., says: Some time since I had occasion to treat one of the worst cases of chronic alcoholism that ever came under my observation.

Patient, man, aged twenty-four, had been a constant drinker for several years, interspersed by occasional sprees, and during one of these I was called to treat him. After giving him medicine to arouse his liver to proper action, I commenced giving him tablespoonful doses of Celerina (Rio Chem. Co.) every four hours. He begged for whisky until he got under the influence of Celerina, which was only a few doses; after that he quieted down, and the terrible appetite for and influence of whisky began to subside. In about eight days he resumed his place in business, and ever since has had no appetite for whisky and no bad results in any form. I do not think it can be equaled as a remedy in any case where it is indicated.

MEDICINE IN HOT WEATHER.—The ever progressive house of Parke, Davis & Co., are out this month with some seasonable suggestions as to eligible remedies for prevalent diseases of hot weather.

They have a very convenient list of intestinal sedatives, antiseptics, antispasmodics and anodynes for diarrhoeal and dysenteric affections, some new expectorants of note for coughs and colds, and a normal liquid ipecac always reliable as an emetic in cases of gastric disturbance due to accumulated fermented food, so frequent a cause of infantile diarrhea.

By way of gossip we may state that this house is largely increasing its facilities for the manufacture of pharmaceuticals. Buildings now in progress of erection will double their capacity for producing this year, and a new laboratory, very complete in its appointments, is now being built for them in Canada.

CHRONIC NERVOUS HEADACHE.—

Celerina	6 oz;
Tinct. hyoscinamus	1 oz;
Tinct. gelsemium	1 oz.

M. et Sig: One teaspoonful taken before going to bed.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., SEPTEMBER 13, 1890

No. 6.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

A CASE OF PUERPERAL ECLAMPSIA.*

BY JOHN G. CECIL, M. D.

*Clinical Assistant to the Chair of Obstetrics and Gynecology,
University of Louisville.*

Mrs. Z., aged thirty-four, white, mother of five children, youngest of whom is eight years old, gives history of having suffered from edema of lower extremities with each of her former pregnancies, also temporary aphasia occurring after the birth of two. Made prompt recovery after each. No evidence of permanent kidney trouble; exceedingly nervous organization; very apprehensive of paralysis, this induced by the previous aphasic attacks, and by the fact that her father died from paralysis. Came under my observation soon after last gestation began. Suffered from digestive troubles during first few months; not more than usual edema of legs appeared during the fifth or sixth month. This never became excessive, and no edema of any consequence showed itself elsewhere. Several examinations of urine during the sixth, seventh, and eighth months showed first scarcely any albumen, later on small quantities, which became progressively greater in amount toward the latter end of pregnancy—this in spite of treatment designed to lessen and control. Was called at 6 P. M. July 23d. She now supposed herself to be within two or three weeks of confinement. Found her half reclining on a sofa, suffering a

most intense nervous agitation, unable to articulate coherently, numbness affecting left side. In a few minutes gave bromide potash, thirty grains, by mouth, which she swallowed without difficulty. Half hour later gave fifteen grains bromide and five chloral. During the next hour gave forty-five grains bromide and fifteen grains chloral. This treatment gave temporary relief, the nervous excitement coming on in paroxysms that rapidly succeeded each other. About 9 A. M., there being evidence of labor-pains, a digital examination was attempted. As soon as the examining finger entered the cervix, which was soft but undilated, she was seized with a hard convulsion. In a few minutes, chloroform being obtained, she was put under its influence, then forty grains chloral *per rectum* given. At 9:30 P. M. she got an emulsion containing three drops of croton oil. Found it necessary to continue chloroform while waiting for purgation. After waiting about an hour gave another drop of croton oil, the same dose twice repeated at intervals of an hour, six drops in all being given. The last dose of oil was followed by a powder containing fifteen grains pulv. jalap and half an ounce Rochelle salts. Finally, in about five hours free purgation was obtained. The tendency to eclamptic attacks continuing, she got twenty grains of chloral by the mouth, and two hours later thirty grains by rectum, making in all one hundred and ten grains chloral and ninety of bromide given in eleven hours.

It being evident that convulsions would continue until delivery, measures looking to hastening this were adopted. The membranes were ruptured and the waters drained away; Barnes' dilators were introduced, one after another, until the cervix was dilated to the largest sized dilator. This purgation and dilatation were accomplished in about nine or ten hours. We

* Read before the Medico-Chirurgical Society, August 8, 1890. For discussion, see page 174.

now endeavored to let up on chloroform so that the labor-pains, which were regular but not strong, might become more efficient. It soon became evident that this would not be safe, for as soon as the patient came out of the chloroform narcosis another convulsion came on, which was only limited and controlled by prompt renewal of the anesthesia. Orificial irritation was practiced to excite uterine action, but did not prove very effective, for the reason that in order to prevent the convulsions the chloroform had to be pushed to such an extent that the uterine contractions were also prevented. It being apparent that there was a decided nervous element in the case, and having obtained free purgation, we felt it safe to give one fourth of a grain of morphine hypodermically. This acted in a charming manner, giving sleep for four and a half hours. She wakened with a third eclamptic attack, which was aborted by chloroform. The cervix was soft and dilatable, but still undilated, the fibers of the internal os not having yielded to more than the diameter of a silver dollar, and the head had not yet entered the superior strait. Elliott's forceps were applied through this undilated os and the delivery accomplished in thirty minutes; after-birth delivered by normal uterine action in forty minutes.

The child was born in a state of congestive asphyxia. It was allowed to bleed at the cord, and revived in half an hour; it lived about sixty hours, and died in convulsions. Morphine was continued in one-fourth-grain doses every twelve hours for a day and a half. The patient woke to consciousness in seventy-two hours from the seizure. She was put on inf. digitalis, purged on third day after delivery, and made a good recovery.

COMMENT.

Attention is called to what I conceive to be the correct management of this affection:

1. Control or modify the convulsions by chloroform.

2. Give chloral with a free hand to prevent their recurrence. This does not interfere with the next step.

3. As this is a disease attributable to non-elimination, obviously the scientific thing to do is to eliminate. The choice of methods is by

purgation. Croton oil, jalap, and Rochelle salts are reliable, speedy, and efficient.

4. If the tendency to eclampsia continues after purgation, the question of delivery must be considered.

5. Labor not progressing satisfactorily delivery may be hastened by rupture of the bag of waters, orificial irritation, Barnes' dilators, forceps, in preference to version, as soon as their application is possible.

6. After free purgation, in the presence of nervous phenomena, before or after delivery, morphine may be given with good effect.

7. Before purgation, morphine, to control convulsive action, must be given in very large doses, and is then no more efficient or reliable than chloral. Its use is contra-indicated because it arrests elimination through every channel; it has a more powerful quieting influence over uterine contractions than chloral; it congests an already congested brain; it retards a prompt convalescence.

Before closing I wish to acknowledge my pleasure in having had the wise counsel, sound judgment, and valuable assistance of Prof. Anderson throughout the management of this case.

LOUISVILLE.

LAPAROTOMY FOR INTESTINAL OBSTRUCTION.*

BY A. M. CARTLEDGE, M. D.

The following case is reported not alone for the interesting features connected with it, but to call attention to a class of cases which I suspect are of more frequent occurrence than we suppose, and which are only relieved by early and bold surgical interference.

Through the courtesy of Dr. Warner I was called Sunday, May 25, 1890, to see N. R., male, aged twenty-four years. Briefly the doctor gave me the following history of the case:

He had been summoned the 21st, and found the young man in great pain from a recently descended right inguinal hernia, brought on while wrestling. After applying taxis the tumor seemed partially reduced, giving some relief

*Read before the Louisville Medico-Chirurgical Society, August 8, 1890.

to the patient. Morphia was given hypodermically, and warm applications ordered applied during the night. Thursday, the 22d, the doctor found him much relieved, the patient also stating that the remainder of the protrusion had disappeared during the night. An examination verified this statement, for no hernia could be felt. Still there was pain, which he referred to the region of the umbilicus.

Friday, the 23d, he was called again, and found the pain in the abdomen still present and more intense. Morphia was given hypodermically, and a cathartic given, as there had been no operation from the bowels. The evening of the same day found him about the same, he having rested easy most of the day from the morphia. No action from the bowels. An enema brought away fecal matter. Morphia was again given.

Saturday, the 24th, he was resting badly. Complained of great abdominal pain, which was described as like the pain felt during an attack of obstinate constipation and bowel trouble he had suffered from some two years before, and on account of which his life was despaired of for ten days. The abdomen was slightly tympanitic, with no tenderness or other symptom in the recent hernial region. Temperature 101°, pulse about 110. Had vomited rather freely once. Morphia was again given, with the effect of quieting him during the day.

The evening of the 24th found him little changed, except the vomiting, which had increased, and which had changed from a watery mucus to a slightly green-tinged fluid. Abdomen more swollen; enema fecal stained; no gas from bowel; respiration labored, and limbs flexed in the attitude of peritonitis. Hot applications ordered and morphia hypodermically. The doctor informed the family that he strongly suspected a continuation of bowel obstruction from some cause, and suggested a consultation. I was requested the same night to see the patient early next morning with Dr. Warner.

During Saturday night he grew rapidly worse, vomiting frequently and in large quantities, the pulse becoming extremely weak and respiration much embarrassed from abdominal tympanitis. Hiccough troublesome.

When I saw him Sunday at 9 A. M. his condition was as follows: Pulse 142, temperature 102°, abdomen tense and very tympanitic, anxious expression of countenance, eyes sunken, and voice weak. There had been some hiccough. The quantity of vomited fluid greatly exceeded that imbibed, and was the green-tinged, sour-smelling serum characteristic of obstruction. No marked fecal odor could be detected.

In consultation with Dr. Warner we agreed upon immediate laparotomy as holding out the only hope of relief. Dr. Ireland, the former family physician, was called to meet us in consultation at 12 o'clock, and if he concurred the operation was to be performed. Dr. W. repeated the injection of morphia and atropia, and we left to return at 12 o'clock. Dr. Ireland fully concurred in our opinion, so that preparations were made and the operation performed in a well-lighted front room of the dwelling, Drs. Warner, Ireland, and Jenkins (now deceased) being present.

The pulse of the patient had improved a little for an hour before being placed on the table. Operation: an incision two inches long was made in the mid-umbilical and pubic line. The peritoneum was much engorged and thickened, with all the evidences of acute inflammation. The cavity contained quite a quantity of bloody serum and lymph flakes. Thinking it probable the cause of obstruction was about the right internal ring, I explored this region first, and to my satisfaction found such to be the case. Tracing by the sense of touch the intestine to this point, the imprisonment of a very small segment of the bowel could be felt. The sensation to the finger was as if some one had taken a loop of intestine, and, pressing it against the internal ring, the merest segment had stuck in the mouth of the ring, and that very little traction would pull it off, as it were. This, however, was a delusion, for a little traction demonstrated the adhesion very firm. I insinuated my little finger in the ring, keeping the ball of the finger next the bowel, and aiding this movement with gentle traction relieved the constriction. Less than one inch of small intestine was imprisoned just within the internal ring. The constricting ring had nearly cut

through the several coats of the bowel on one side, the serous coat being entirely destroyed. The integrity of the knuckle of bowel was not much impaired.

The cavity was flushed with boiled water, a glass drain inserted, and the wound closed. Pulse better at close than beginning of operation. Hot bottles were applied and patient placed in bed. Vomiting continued on any attempt to take fluid. Even the wetting of the lips was sufficient to excite retching. The respiration, which had been very slow and sighing, showed little tendency to improve. Urination frequent and copious. Nothing was given but spoonfuls of hot water for forty-eight hours, and this was often rejected by the stomach.

Monday, 26th, 8 A. M., temperature 100°, pulse 120; vomiting, and restless; respiration labored and slow.

Tuesday, 27th, 6 A. M., temperature 96½°, pulse 128. Increased artificial heat, whisky by rectum, which brought temperature to normal by noon. Passed gas by bowel. Gave enema, which was followed by fecal movement. Removed tube same evening, as there was no more secretion of any account. The tube was first aspirated every half hour, which was gradually increased to intervals of four hours.

From this time on the patient made an uninterrupted and uneventful recovery. The stitches were removed on the ninth day.

LOUISVILLE.

A COMPOUND FRACTURE OF THE UPPER AND LOWER ARM.*

BY DANIEL L. FRY, M. D.

I was called to see a boy who had fallen from a car while in motion, and made a careful examination of the whole body. The examination revealed a compound fracture of the humerus just above the insertion of the deltoid, with a great amount of laceration of the soft parts, one large opening and two small ones above. The end of the lower fragment was pressed through the wound about three inches or more. On introducing my finger into the wound, I found the vessels and nerves intact. There

was a great deal of hemorrhage from cutaneous vessels. Upon further examination a fracture of the left radius of the same arm was found.

Fractures of the lower end have been of special interest. Colles, of Dublin, first described them in 1814, and such injuries are now generally known as Colles' fractures.

Dr. R. W. Smith has done much to draw attention to their nature in his work on fractures, where he explains the characteristic deformity by muscular action.

The object in the treatment of fractures is to get the bones in 'natural position and to hold them in place. The splint is the best means that can be resorted to in a compound fracture, with a large external opening with laceration of the soft parts, for there will be more or less suppuration; but under asepsis suppuration has been reduced to a minimum.

It is wonderful what antisepsis and asepsis has done for surgeons; a great number of lives have been saved, and limbs sustaining violent injuries restored to normal function and shape, and great reputation for the medical profession at large has been accomplished.

It is by this means of dressing that I saved this boy's arm from being amputated. The wounded parts were washed with hot carbolized water, as hot as the patient could stand; a syringe was used for that purpose; the washing was concluded with listerine water, one to eight parts.

There were no openings on the inner side of the arm for drainage, so one was made, for free drainage is of great importance in a compound fracture. I introduced a drainage-tube through the opening, and left it in for several weeks.

Care was taken of course to cover all the parts with bichloride gauze, with iodiform dusted all over the wounded parts.

The wound being well dressed, the surgeons will do well to let the dressing remain on till the presence of pus or too great amount of surgical fever demands an examination.

This care is of very great importance in showing what can be done in laceration of soft parts complicated with fractures.

Splints are of great importance, and care should be taken with them. The one I used

*Read before the Kentucky Central Medical Association, July 17, 1890.

was a straight piece for the upper arm reaching from the axillary space to the elbow, and for the lower arm the pistol splint. At the elbow they were united with a screw, so as to be movable. Pains were taken to pad the splint well with cotton.

After three to six weeks the surgeon should begin to use massage and passive motion. This was kept up for several weeks. The distal end of the splint was taken off in three weeks, so patient could get motion in his hand and arm, and in six weeks the upper splint was removed. Now the boy has all the motions in the left arm and forearm as in the right, and the symmetry of the arm is so perfect you can not tell where the bone was fractured only by the cicatrix in the integument. There is no excuse for having an ankylosed joint; all that is needed is attention to detail, massage, and motion, and it is the duty of the surgeons to see after this important point.

STANFORD, KY.

CANCER OF THE WOMB—HYSTERECTOMY A CASE.*

BY A. M. CARTLEDGE, M. D.

Professor Principles and Practice of Surgery, Louisville Medical College.

The specimen I present to you this evening is the uterus of Mrs. K., aged forty-four years, mother of ten children, the youngest being seven years old. She had one miscarriage five years ago. I first saw her early in November of the present year, with Dr. John Hays, of this city. The doctor had previously diagnosed carcinoma uteri, and, as the disease was confined to immediate uterine tissue, advised an operation. My examination led me to a confirmation of Dr. Hays' opinion. The cervix was much enlarged and indurated, the external os and lower cervical canal in a state of cancerous ulceration. Frequent hemorrhages had occurred for some four months, more severe at menstrual period. After a few days of preparatory treatment the operation of vaginal hysterectomy was performed at the Norton Infirmary, on November 12th. Before placing the patient upon the table

the vagina was irrigated with a one-to-three-thousand bichloride solution. She was placed in the extreme lithotomy position and retractors introduced. The cervix was threaded with heavy silk cord, and this served for traction in drawing the cervix down. After circular division of the vagina close to the cervix, the posterior *cul-de-sac* was broken through and the finger passed to the anterior one in order to guide the close dissection necessary in front. When both *cul-de-sacs* had been opened the broad ligaments were clamped with special forceps, the uterus drawn down and cut away. Bleeding vessels were subjected to forceps left in place. Of these there were eight pairs, beside the two large ones compressing the broad ligaments. The vagina was lightly stuffed with strips of iodoform gauze. The time of the operation was fifty minutes. The small forceps were removed in twenty-four hours and the broad ligament forceps in forty-eight hours, no hemorrhage following. The temperature rose to 102° on the third day, and by the fourth day suppuration was rather free. Drainage was good, however, and irrigation three times a day sufficed to maintain comfort and a temperature below 100°. The patient left the Infirmary four weeks after operation, and is now able to go around the house, though gaining strength slowly. The shape and size of the vagina, pelvic capacity, and degree of laxity of uterine supports have much to do with the ease or difficulty of a vaginal hysterectomy. Every physician is acquainted with the marked difference of women in these anatomical particulars. The case I have just reported had a narrow, deep vagina, the uterus high up and firmly supported.

We often meet women in gynecological practice wherein the vagina is so capacious and the uterine ligaments so relaxed that a vaginal removal of the uterus would be a comparatively easy undertaking.

A microscopical examination of the uterus made by Prof. H. A. Cottell confirms the diagnosis of carcinoma in the case reported.

LOUISVILLE.

*Reported to the Louisville Medico-Chirurgical Society December 20, 1889.

THE infant mortality has been very high in Baltimore since the 1st of July.

TREATMENT OF SYPHILIS BY INTRAMUSCULAR INJECTIONS OF A NEW INSOLUBLE PREPARATION OF MERCURY (HYDRARGYRUM THYMOL-ACETICUM).

BY CHARLES SZADEK, M. D., OF KIEFF, RUSSIA.

The introduction of the hypodermic medication of syphilis with mercurial insoluble salts by Scarenzio in 1864 has attracted much attention among syphilographers of Europe and America. The method has found both supporters and opponents, however, most all of whom attested its remarkable efficacy in syphilis. At the present time the calomel, yellow oxide, and salicylate of mercury are most generally employed.

My personal experience with this method commenced after the year 1885. In my own hospital and private practice I have made in the last five years (1885-1889) more than a thousand intra-muscular injections upon a hundred patients. Calomel, the yellow oxide, carbolate and salicylate of mercury were all tried without noticeable inconvenience; according to my experience, after intramuscular injections of quicksilver preparations, abscess never occurs, coagulations (nodes and induration of the point of injection) are rarely seen.

Tadassohn and Zeising (*Viertelj für Dermatologie und Syphilis*, 1888. 5), of the Breslauer Polyclinic, have recently published a very valuable paper on the hypodermic injection of a new insoluble preparation of mercury (hydrargyrum thymolo-aceticum) in the treatment of syphilis. The results of this treatment have been very favorable. In the sixty cases related, the duration of treatment varied from twenty to forty days, with 210 injections.

The formula for injections is to be carefully noted:

Hgyri. thymolo-acetici.....	1.0
Paraffini liquidi.....	10.0
M. f. suspension.	

Welander (*Archiv für Dermatologie und Syphilis*, 1889, 5) also has made 382 intra-muscular injections of a new preparation in sixty-one cases of syphilis, and is satisfied with the results obtained. He employed a suspension of one and one half grains in fifteen of liquid paraffin. The injections were made usually every fourth day,

and each patient received an average of six or seven injections. As a rule the treatment was well borne, and it was seldom that the patients complained of any pain; when this was felt it was usually of very moderate intensity. In one case a small abscess was noted, but it disappeared without causing any trouble. Stomatitis was present in a few cases. The symptoms of syphilis disappeared promptly within three or four weeks, although relapses were noted in several instances.

I have made 102 intramuscular injections of hydrargyrum thymolo-aceticum upon fifteen patients with secondary syphilitic affections, and selected the gluteal region, where I have injected the drug deeply beneath the muscular fasciæ. I suspended the medicament in water with a little gum arabic. The formula of the injected suspension was the following:

Hgyri. thymolo-acetici.....	1.5
Mucilag. gummi arabici.....	0.5
Aque destillatæ.....	20.0
M. f. suspension.	

The injections of 7 per cent suspension of hydrargyrum thymolo-aceticum were given at intervals of three or four days. Six to ten injections, each containing 0.5-0.75 of the medicament, suffice in the most cases of non-invererate syphilis. Its therapeutic value was especially remarkable in early stages of syphilis. Syphilitic roseola and the papulous affections of the mucous membranes yielded to the treatment after four to six injections or in twelve to twenty days, the relapsing syphilids after two to four injections, papulous cutaneous forms and ulcerative affection of the mucous membranes after six to eight injections or in fourteen to twenty-five days; pustulous and tuberculous affection of the skin required from eight to ten injections (2 cases).

The injections occasioned no intense pain; in no case did an abscess or infiltration form either at the point of injection or in its vicinity; disturbance of the digestive organs, of respiration and circulation, or any general disorder of importance, as a result of the toxic action of mercury has never come under my observation.

The advantages of injections of the new mercurial preparation given with care, and following

the proportions above mentioned, may be summed up thus :

(a) Simplification of action and absolute cleanliness; this point is of much importance in private practice. (b) The smallness of the amount of mercury used and absence of toxic symptoms. (c) Promptness of therapeutical action. The local reaction after injection of the new preparation was very little, even less than after the use of calomel and yellow oxide of mercury; the patient generally complained of dull pain, which ceased in two hours; the gluteal region was not tender on pressure in one day after the injection.

Societies.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

August 12, 1890, Dr. W. W. Parker, President, in the chair.

Dr. W. W. Parker read a report of a *post-mortem* in a case of osteo-sarcoma.

On the 1st of January, 1890, he saw Mrs. C., aged twenty-four, mother of one child of three years, and now four months pregnant, who had been suffering about two years with a tumor in the right groin. It was nearly the size of the fist, hard and painful on pressure. It appeared (small in size) soon after the birth of her child, and was thought by the doctor then in attendance to be an enlarged gland. Not much attention was paid to it then, as it was not very painful. It grew very gradually, and after two or three months she consulted a surgeon, who pronounced it "cancer." This diagnosis shocked her so that she at once took to her bed and commenced taking opium. She remained in bed three months in the greatest distress. She finally took heart and got up and attended to her household duties. Several doctors saw her. The tumor was aspirated, and nothing but blood escaped. Electricity was used on the tumor for some time, and seemed to give great relief, but did not reduce its size. She still continued to take opium.

When Dr. Parker first saw her she was cheerful and quite active, going about the house, and often on the street, though much

emaciated. The tumor had been for some time at a stand-still, and continued so a good while after he began attendance. The right leg (the right side being the one affected) was not larger than her arm in health—indeed, not so large. The muscles were shrunken and flabby, yet she walked quite well and fast, with a slight limp. The pain was intense down this leg to the heel, sometimes very severe in the calf. She had never been leeches or blistered. The leeching was tried by Dr. Parker, but no good was done; but small blisters, often repeated, gave great relief. There was a distinct aneurismal thrill in the tumor, which now filled the iliac fossa, and was as large as the doctor's fist, but oblong in shape. The thrill proceeded from an artery running obliquely across the tumor outward.

Dr. Parker called in Dr. Isaiah H. White to see if this artery might not be tied, thinking it might be feeding the tumor. He thought that at least an exploratory incision would be justifiable, provided the lady passed safely through her confinement. She had now been pregnant six months. She was safely delivered at term of a small but healthy infant—chloroform, whisky, and ergot being used during the labor.

Six weeks after her confinement she rode out (against Dr. P.'s advice), and came home in great pain and went to bed. So great was the pain that it was necessary to administer chloroform, as opium would not give relief. She took immense quantities of the former. He forgot to say that about three weeks after her confinement the pain entirely disappeared, strange to say. She then stopped the opium and chloroform and had great hopes of complete recovery.

Her appetite, too, became enormous. She ate six hearty meals a day, and would awake at daybreak and demand her breakfast. Her appetite reminded him of some convalescents from typhoid fever. It was surprising to see how rapidly her strength and flesh increased. Her spirits rose to the highest pitch. She was the happiest woman the doctor ever saw. No opiate was now taken.

But in exactly fifteen days the pain returned with great violence, as stated above in connection with the drive after her confinement.

Dr. White again saw her with Dr. Parke

with a view to exploring the tumor. They found it had rapidly increased in size since her confinement, had extended downward, and the arterial thrill was now more distinct.

After taking into account the uncertainty of the diagnosis, and that it would be necessary to enter the peritoneal cavity in order to thoroughly explore the tumor, both doctors concluded that it would not be wise to attempt an operation. The pain increased to such an extent that she sometimes had to take two drams of McMunn's elixir of opium every hour.

From the time she rode out until her death (July 27th) she took, in addition to immense quantities of opium, nineteen pounds of chloroform. Much of this was wasted, as she often took it herself. Her death was sudden. Upon rising to vomit she fell upon her pillow and expired without a struggle.

Thirty-six hours after death, in company with Dr. White and Dr. J. Michaux, who had at one time attended her, Dr. Parker laid open the tumor by making two incisions—one over the entire length of the growth downward and inward; and a second (small one) across the first and running inward. The muscles covering the tumor looked healthy. Upon reaching the mass he found it impossible, on passing his hand inward, to dislodge it from the brim of the pelvis. It was bound down to the brim as far as the pubis by a dense fibrous tissue (thickened periosteum perhaps). He then withdrew his hand and passed it outward and backward along the crest of the ilium, coming in contact with an immense amount of diseased bone, which extended backward nearly to the sacrum. In some places he could push his finger through the bone, which was honey-combed. He made an incision into the tumor, and found part of it soft—not exactly medullary, but not at all scirrhous—and of the color of pale muscular tissue.

As the origin of the disease was now plain he did not remove the whole tumor. It evidently began in the bone or periosteum. The exciting cause may have been the lady's striking her right groin against the edge of a table about four years before the trouble began to manifest itself. The accident produced great pain, which lasted for some time.

Dr. Parker said that he read quite a lengthy

paper before the Medical Society of Virginia two years ago against the habit of some excellent surgeons who think it their duty to be frank with these patients, and in this paper he took the ground that their course was always unwise in the case of cancer.

This patient was a beautiful woman, full of life and energy, and lost one or two years of comparative happiness by the announcement of the surgeon that the growth was a cancer.

One gratifying result of this *post-mortem* was that it relieved the minds of the husband and mother of the idea that the patient had been neglected or the case mismanaged. It is doubtful if any operation at any time would have been beneficial in its results.

Dr. Michaux had attended this woman in her first confinement, and had her in charge when the tumor first developed. Two and a half years ago she came to him complaining of pains in the right iliac region before the appearance of the growth. He examined her *per vaginam*, and by means of bi-manual palpation, suspecting some ovarian trouble, but found no enlargement of that organ or other evidences of disease.

The pains from the beginning came on in paroxysms, which, as time and the case advanced, grew more violent, and the intervals became shorter. Then a small nodule appeared in the right iliac region—growing, but not rapidly. The length of the pains increased too. Thinking to learn more he used the exploring needle. He found a very dense tumor—a few drops of blood, nothing else, escaping. He declined to operate, thinking the growth malignant. Being invited by Dr. Parker, he attended the *post-mortem*, and was still more inclined to think it malignant.

Early Removal of Suspicious Growths Advocated. Dr. J. N. Upshur thought Dr. Parker's case very interesting. He had read in some journal a report in which the writer advocated the removal of suspicious growths before the appearance of any cachexia or involvement of lymphatic glands. He would like to know the result of a microscopical examination in Dr. Parker's case. The symptoms pointed to malignancy, and the character of the growth as well as its involvement of bone suggested the

colloid variety. Dr. Upshur did not agree with Dr. Parker in not telling the patient frankly the prognosis. He thought there was a great deal in the manner of telling. Break the intelligence so that the shock and horror of it all be taken off. He had never regretted being frank.

Adenoma of the Mammary Gland. Dr. Upshur was reminded, by Dr. Michaux's remarks, of the case of a lady whom he had delivered in September last. She had a good labor and a satisfactory "getting up," except that she had a slight continued fever during the last two weeks of her confinement. She also suffered from sore nipples, for which he had used lead nipple shields. At the seventh week he was called again to see the patient, who was suffering from supposed mammary abscess, due, her mother thought, to bruising from the nipple shields. The doctor thought this impossible, as the metal was too soft. After poulticing he gave chloroform. Fluctuation being as distinct as he had ever felt, he lanced the breast. To his surprise only a little sanguinolent matter was discharged, and the tissue cracked under the knife like a potato. The absence of pus and the peculiar feel on cutting were both very striking features. The pain and throbbing subsided, and the part not discharging, the poulticing was stopped after a while. The pain and throbbing re-commencing, the doctor went through the same process of poulticing and lancing with the same experience, except there was this time some pus. Later still he repeated the above treatment, and this time, upon continuing the poulticing, the place discharged more pus than it had done before. He stated to the patient's mother that this was not ordinary mammary abscess, but an adenoma, being benign at the time, but that it might in the future degenerate so as to need surgical interference.

After this, under the influence of tonics, the patient's general health improved. He used potassium iodide and fluid extract gentian internally, and five-per-cent oleate of mercury locally; but not succeeding in reducing the tumor after fair trial, the treatment was discontinued and the patient urgently advised not to rub or handle the gland. She was now put on

the syrup of lactophosphate of lime, with very decided improvement in her general health. The baby had not been weaned from this breast because of the free flow of milk from the inferior part of the gland, and the fear of abscess in that location; but so soon as the milk could be dried up the weaning from this breast was done. When the patient passed from under Dr. Upshur's care she was looking as well as he had ever seen her. She had subsequently an attack of *la grippe*, and a few weeks later cholera morbus.

The said patient is now in Dr. Hugh M. Taylor's hands, and he (Dr. Upshur) thought the subsequent history of the case would be of interest to the Academy. He had erred, said the doctor, in two points:

First: He believed that if he had stated frankly the probable outcome of the trouble and had advised excision, the woman's life would have been either saved or prolonged.

Secondly: In the light of subsequent history, he believed he erred in lancing the breast, as no good had resulted.

This was a case which illustrated the importance of frankness and early excision. He thought the latter very important in the case of suspicious growths.

Scirrhus of the Mammary Gland. Dr. Upshur also referred to an old lady of sixty. She had in one mammary gland an irregular hard lump, but her former physician (now dead) advised her to let it alone, because at that time it gave her no trouble.

Some time ago she sent for Dr. Upshur and showed him the lump. She complained of trouble in using her right arm, and tenderness of the breast. There were darting pains and retracted nipple. The lump was hard and irregular, though not adherent to the chest wall, and presented symptoms of scirrhus. He advised removal. He could not convince her and her friends of the nature of the trouble. He told her frankly if she waited too long it would be too late.

Dr. Parker thought Dr. Upshur wrong in lancing in the first case he reported. This should never be done unless there was absolutely distinct fluctuation. He was suspicious of breast tumors anyway, unless he could be absolutely sure of abscess. He thought Dr.

Upshur also wrong in telling the patient the diagnosis in the case of malignancy. He had as lief shoot a woman as to tell her she was cancerous. Tell her friends always, but not the patient. Thousands and thousands were made miserable by this practice. He was sustained, said the doctor, by Mr. Locke.

Dr. Upshur stated that the fluctuation was positive and unmistakable. He believed he would be in error to state that fluctuation and the peculiar feeling in cutting, before described, when taken together were characteristic of malignancy.

Dr. Hugh M. Taylor said the history of the first case reported by Dr. Upshur had been given him just about as the doctor had related it. He refused to say any thing about the case, as the patient and friends, being very sensitive, preferred that it should not be spoken of.

The Diagnosis of Scirrhus of Rectum in a Child of Thirteen Years Confirmed. Dr. Michaux referred to the case of scirrhus of the rectum in a child of thirteen years, reported by him at the meeting of this body July 8th. Since that report he called Dr. J. S. D. Cullen in consultation, who confirmed his (Dr. Michaux's) diagnosis. The growth finally closed up the caliber of the bowel, but the family would not submit to artificial relief. The child died, the doctor thought, more from lack of drainage through the bowels than from sheer malignancy. He had only one action for fourteen days. That was just before his death. It was small in quantity, consisting of a little mucus and blood, with a very small amount of fluid fecal matter. He thought there could now be no doubt as to the malignancy of the trouble.

Point of Selection for Making Artificial Anus. Dr. M. D. Hoge, jr., had read Dr. Hunter McGuire's report on twenty-one cases of suprapubic cystotomy, in which Dr. McGuire said that if he had a case upon which to operate for making an artificial anus he would select somewhere in one of the recti muscles near the median line, because he had noticed that the contraction of these muscles tended to close any opening that might be about the location just mentioned. This case of Dr. Michaux would have been a good one for such an operation. The boy's life might have been prolonged if

such a step could have been taken after the bowel was closed.

Osteo-sarcoma of the Orbit. Dr. Charles M. Shields, three months ago, saw a child eighteen months old suffering from protopsis of the right eye-ball. It began as a drooping of the upper lid. Ptosis soon gave place to protrusion of the ball. At the time he first saw it (five weeks after its commencement) the right eye-ball was about three quarters of an inch in advance of its fellow. The cause seemed to be some growth or enlargement situated about the upper and outer part of the orbit. The said growth or enlargement continued to increase in an upward and outward direction for a period of three weeks, when the doctor advised an operation. The original trouble seeming, as above stated, to be at the upper and outer part of the eye made him suspect a cancerous enlargement of the lachrymal gland.

He went with an assistant to the patient's home, intending to put it under the influence of chloroform and examine the part, also to draw some fluid from the suspected gland for microscopic examination. He found the child, however, had a fever, and he turned the patient over to the family physician.

In a few days the said physician called in Dr. Shields, who then found the child had decided meningitis, with high fever and marked episthotos. There was also purpura hemorrhagica over the whole surface of the body. The child died.

The day before death there was a hemorrhage from the nose, which the doctor attributed to extension of the growth into the ethmoid bone.

A *post-mortem* was held. A tumor had begun from the roof at the upper and outer part of the orbit. This fact, and its growing upward and outward, had originated the idea of cancer of the lachrymal gland. The growth extended over into the ethmoid and involved it considerably. He had sent a specimen to the Army and Navy Bureau for microscopical examination. He had gotten no report. He thought the growth an osteo-sarcoma. The most peculiar feature about the whole affair was the purpura hemorrhagica over the whole surface of the body.

J. W. HENSON, M. D.,

Reporter.

ALLEGHANY COUNTY MEDICAL SOCIETY.

Stated Meeting, August 19, 1890, W. S. Foster, M. D., President, in the chair.

Dr. Werder reported five laparotomies:

CASE 1. *Intra-ligamentous Cyst*. Aged twenty-two years; epileptic; typhoid fever in October last, followed by bad health. Noticed a tumor growing since, reaching from one to one and one half inches above the umbilicus down into the vagina, bulging out Douglas' *cul-de-sac* and pushing down the anterior wall of the rectum, in fact almost completely filling out the pelvic cavity. The tumor was immovable, fluctuating, and distinctly pulsating both over the abdomen and in the vagina, suggesting the possibility of an aneurism. Exploratory laparotomy, March 29th, exposed an intra-ligamentous cyst, which had to be peeled out of its capsule. It was a tedious and difficult task. Drainage. Patient made an excellent recovery, without rise of temperature or notable increase of pulse-rate. Had an epileptic attack immediately after operation, then none for a week, though previous to operation she had a number of them every day. After first week they returned at intervals of several days.

CASE 2. *Pyosalpynx*. Miss M. D., twenty-six years of age, had poor health for several years; about a year ago she was obliged to go to bed, when an abscess ruptured into her rectum, which continued to discharge for several months. After the discharge had ceased her health improved and she gained flesh, but six weeks later she experienced great pain in her right side, and when she entered the Mercy Hospital another abscess had ruptured into the vagina. She was extremely emaciated and anemic. Laparotomy performed April 6th. The anesthetic used was the "mixture." Immediately after opening the peritoneal cavity she became asphyxiated. Respiration and pulse were arrested for fully five minutes; artificial respiration was performed, head and chest lowered, and hypodermics of whisky administered. Probably ten to fifteen minutes passed until the respiration and pulse became normal and the operation could be continued. On introducing my hand into the pelvis, I found one large mass from which neither uterus, ovaries, or tubes could be distinguished. After a great

deal of trouble I succeeded in freeing the right tube and ovary from their adhesions; both contained pus cavities. The left tube was also removed with the greatest difficulty; its ovary, however, could not be found. A drainage-tube was inserted. Twenty-six hours after the operation a fecal odor was detected in the discharge from the drainage tube. The following day she commenced to discharge fecal matter in large quantities, and from now on most of her feces passed through the tube and on the sides of it, continuing to do so for a week. The wound was kept clean by enemata, which were immediately returned through the fistulous opening. During this time her appetite was poor, and vomiting very frequent, so that she became exceedingly weak. The fistula gradually closed up, so that at the time of her discharge from the hospital there was only (sometimes at intervals of several days) a slight discharge of flatus. The occurrence of this fecal fistula can easily be explained by the fact that the left tube, distended with pus, had become adherent to the rectum and discharged its contents through the latter. In separating this tube from its old adhesions to the rectum, the old rectal fistula of necessity was reopened, and as a consequence, by virtue of the life-saving drainage-tube, the fecal matter found its way through the external wound.

CASE 3. *Pyosalpynx*. Mrs. A., three years married, aged thirty years; had one child at eight months, and was never in good health since. Had three attacks of pelvic peritonitis since; with the last one she was brought into Mercy Hospital. A very tender mass could be felt on both sides of her uterus, which was diagnosed as a double pyosalpynx. Laparotomy, April 29th. Tubes and ovaries on both sides very firmly bound down to pelvic floor and adherent to loops of intestines. They were brought up with considerable difficulty and tied off. Ovaries on both sides were firmly attached to their corresponding tubes, each ovary and tube forming one abscess sac. Drainage. Patient rallied badly from the operation, and vomited incessantly. She had taken ether very badly, a large quantity being needed to keep her relaxed. The incessant vomiting was therefore attributed to the ether. It kept up

for forty-eight hours; for thirty hours her pulse was about 160 and very feeble; had Cheyne-Stokes respiration and an ashy color about her face. She was fed and stimulated freely by rectum, and forty-eight hours after operation she was much improved, her convalescence being then uninterrupted by elevation of temperature, and with a good pulse; appetite was good, and she was sitting up in bed, when on the evening of the twelfth day a sudden change came over her; she complained of pain about the chest and of loss of appetite. Had shown symptoms of hysteria a day or two previous to this. I examined her carefully; her pulse was 100; temperature perfectly normal; abdomen flat without the slightest tenderness. She rested well during the early part of the night, but toward morning she became very restless, and died suddenly at 6 A. M. on the thirteenth day after the operation. A *post-mortem* examination could not be obtained. Her death was entirely unexpected and its cause very obscure, though I have reasons to suspect pulmonary embolism.

CASE 4. *Solid Tumor of Right Ovary and Ascites.* Mrs. S., aged forty-five, no children, consulted me about an abdominal tumor, situated on right side of uterus, hard, irregular, freely movable, and reaching midway between the anterior superior spinous process of the ilium and the umbilicus. Lately she had suffered so much pain that she had to be kept under the influence of opiates constantly. The diagnosis was either solid tumor of right ovary or sub-peritoneal fibroid of uterus with long pedicle. Laparotomy, May 6th. On opening abdomen a considerable quantity of ascitic fluid escaped. The operation was extremely simple, as there were no adhesions whatever. Patient made an uninterrupted recovery, the temperature never being above normal. The tumor, of the size of a large cocoa-nut, had become partly cystic and appears to be a fibroid of the right ovary.

CASE 5. *Abscess of Left Ovary.* Miss Annie C., aged twenty-four years, has been in bad health for over a year. I was called to see her about a year ago, and found a large mass to the left of her uterus, not very tender to the touch, and fluctuating. She was greatly reduced in

flesh and very weak. Under treatment her general condition improved, but her local trouble remained the same, though local treatment was conscientiously employed for four months. I then advised laparotomy, following my diagnosis of left pyosalpinx, but the operation was refused. She then placed herself under the care of another physician. Two or three months later, while going to her physician's office, on getting off the street car an abscess ruptured through her vagina, and this was followed by a severe attack of pelvic peritonitis. At this time I was again called in, and found the mass on her left side considerably larger and exceedingly tender. She was now very anxious to have the operation performed. Laparotomy, June 16th. Removed a large ovarian abscess containing about a pint of pus. The sac was adherent to the omentum, intestines, anterior surface of bladder, and had to be peeled out; on doing this, the tube, firmly attached to it and to the pelvic floor, was broken off; the remaining portion was then brought up with great difficulty. The ovary was one large abscess cavity, and the tube also contained pus. The right tube and ovary were, contrary to the usual rule, not removed, as the patient's condition was such as to make it dangerous to perform a second operation on her, especially as they seemed perfectly healthy. In breaking up the adhesions around the abscess sac I accidentally ruptured it, and the pus poured freely into the abdominal cavity. This was thoroughly and repeatedly washed out with hot water and a drainage-tube introduced. Her recovery was uninterrupted; the temperature and pulse remaining perfectly normal, except on the day after the operation, when the temperature rose to 100°. She is now in perfect health and has gained much in flesh.

Dr. MacFarlane: It is gratifying to see so many patients relieved of tumors who do well. I do not say that it occurs in the hands of all operators, but very frequently the patient is left in a condition nearly as bad as that in which she was prior to the operation, the only effect being to prolong life for a time.

Dr. Werder: I will simply state that it is very unfortunate when the patient is left in the condition spoken of by Dr. MacFarlane. It is very important in performing a laparotomy

not to make your abdominal incision larger than necessary. A small incision only is needed, not more than three inches. Now, if this is united very carefully, and the stitches put in at proper intervals, I think hernias will not occur very often, though they can not always be prevented. In regard to fistulas, those are things that will often occur from septic ligatures. If you have not your ligatures absolutely septic, it is very likely that a fistula will follow, but, with perfectly aseptic material, it should be a very rare occurrence to have a fistula.

Dr. Kearns reported a case of typhoid fever. A boy twelve years old, in the third week, ceased to speak even in monosyllables, and this condition continued for about ten days. During this time there was no apparent impairment of intellect. Sitting at the bedside of the patient and telling him to put out his tongue, he did it instantly. Telling him to look toward me that I might examine his eyes, he did it instantly. The pupils of the eyes were markedly dilated. Then, at the expiration of these ten days, the case assumed the very opposite condition and became loquacious; he would take up any conversation which occurred in the room and follow it up repeatedly. This condition continued day and night with some short intervals of rest for ten days, when it gradually stopped. The pulse was accelerated during this period of excitation. It was at a normal stage during the period of quietude. All this time the stomach had been in good condition. Now here are two extremes. What condition of the brain and nervous system is involved in these conditions of two extremes in the same patient and the same disease? This cerebral excitation was very difficult to control. The simple remedy which appeared to have the desired effect was calomel. I administered one fourth grain of calomel every two hours; then, when the bowels began to run off, in smaller doses. To me this was a very interesting case, and I ascribe the nervous symptoms to a complicating meningitis.

Dr. Thomas: During the month of April, I saw a patient with typhoid fever. The boy was thirteen years old. He had been sick about a week. The fever ran an ordinary course. About the twenty-first day there was

defervescence, and I presumed the case was going on to convalescence. I visited the boy as long as I remained in the city, and in the mean time he would not speak a word until, the day before I went away, I got him to say one word. I did not feel uneasy about him, his temperature not being above normal. He went into the hands of Dr. McNeil. On my return I found the boy all right, and was told that in speaking to his grandmother, in whose care he was, upon his beginning to talk again, the first word he said was cracker. He said, "Cracker, cracker, cracker," for three or four minutes; then he ceased calling for crackers. I looked upon it as caused by anemia of the brain.

Dr. Stewart: I remember a case where a man lost the power of the right arm. The loss was progressive, and then he had convulsions. The convulsions were in the arm affected. Subsequently they became general and he would become unconscious. The convulsions became very frequent, several times a day. An operation was performed under the supposition of lesion in that area. The man had had syphilis. Iodide of potassium had no effect on the case. The brain was uncovered and only a localized meningitis was found. Incisions were made into the brain and nothing was found. The man ultimately recovered the perfect use of his arm and had no more convulsions.

Dr. McKennan: I find that it is not at all uncommon to have peculiar mental states following typhoid fever; mental weakness, and also very frequently mental exhilaration. I have seen many cases of insanity which have been traced to typhoid fever. I have never seen a case of meningitis in a child with typhoid fever. The whole weight of authority goes toward the supposition that the lesion is purely of a functional character, and that there is rarely any structural lesion, although some authorities state the possibility of an embolism which could only involve one artery.

Dr. Lange: No matter what cerebral symptoms we may have in typhoid fever, there is no justification for the assumption of meningitis. No matter how violent or how peculiar are the cerebral symptoms, the assumption of meningitis is not correct, is not justified. I do not know that typhoid fever and meningitis are in-

compatible, but I mean to say that *post-mortem* examinations in cases of typhoid fever which presented most violent and most strange ataxic symptoms have so invariably proven the absence of meningitis, and of all inflammation, that such symptoms can not be correctly assigned to meningitis or to any structural lesion, but are to be considered only as the toxic effects of the typhoid-fever poison. Neither can I understand how the speech center can be affected by a meningitis without previous and greater injury to the motor areas, which, being in closer apposition to the meninges than the center of speech, would primarily and to a greater extent be subjected to meningeal pressure. For this reason paralysis is as common in meningitis as aphasia (barring, of course, comatose cases) is rare.

THE MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, August 8, 1890, J. M. Ray, M. D.,
President, in the chair.*

Dr. Turner Anderson presented for a second time a patient whom he had treated by thoracentesis and drainage for pneumo-pyothorax. (See American Practitioner and News, Vol. 10 p. 104.) The case had gone uninterruptedly toward recovery. The sinus occupied by the tube was reduced to one half the former length. It was removed for good before the Fellows by Dr. Anderson, who put in its place a piece of jute. Complete recovery is a question of a brief space of time only.

Dr. A. M. Cartledge exhibited a surgical case which he had devised for the use of the general surgeon when called to do abdominal surgery. The case contains all necessary instruments and appliances packed in very small space. The speaker said it had been urged by certain specialists in this line of work that the general surgeon ought not to attempt abdominal surgery because his instruments used in general work can never be absolutely aseptic, while the same count was made against the surgeon himself. With methods now in use enabling the surgeon to disinfect himself, and a case of instruments kept for abdominal work alone, these objections are fully answered.

Dr. H. A. Cottell said that he considered

the suggestion and device of Dr. Cartledge as very pertinent in these days of absorbing specialism. Any thing that tends to enlarge the sphere of the general practitioner, and to contract that of the specialist, meets a sore need of the times. There is, strictly speaking, but one exclusive field for specialism in surgery, and that is ophthalmology. The delicate work upon the eye requires a skill obtainable only through years of special practice. The general surgeon who would hesitate to undertake any rational operative procedure upon any other organ of the body is not worthy of the name.

Dr. William Cheatham exhibited a polypus which he had recently removed from the larynx. The patient was a lady of middle age who had not been able to speak for a year, while she presented other symptoms of tumor in the larynx. A laryngoscopic examination revealed the tumor, which was pedunculated, being attached to the left side of the larynx just below the true vocal cord. An attempt to remove the growth by the McKenzie forceps failed because of the inflexible character of the instrument. The instrument used, invented by Shoetter, of Vienna, adapted itself to the situation and made the removal of the growth easy. The speaker said that he had hitherto been in the habit of sending such cases to the specialists of the East, but that the ease with which this tumor was removed would lead him to undertake the treatment of cases that might come to him in future. Dr. Cheatham also exhibited an eye which he had removed because of destructive inflammation following an injury. The patient received a blow in the eye, from the immediate effects of which she apparently recovered, and it was not until six months after this accident that symptoms of destructive inflammation appeared. The case in this point is truly remarkable.

Dr. A. M. Cartledge read the essay of the evening. Subject: "Laparotomy for Intestinal Obstruction." (See page 162.)

Dr. John G. Cecil read a "Report of a Case of Puerperal Eclampsia." (See page 161.)

DISCUSSION.

Dr. Frank C. Wilson said that prophylaxis was the great *desideratum* in these cases, and

that in a majority of them measures of prevention were effective. During the latter months of pregnancy the physician should see his patient at intervals of not less than ten days, that edema and albuminuria may find prompt detection. When these danger-signals appear it is the speaker's practice to prescribe a mixture consisting of benzoic, boracic, and salicylic acids, or their sodium salts, with the free use of alkaline mineral waters. Under this treatment he has had the satisfaction of seeing the edema and albumen disappear or become reduced to a point of safety, the woman going on to term with comfort and passing through delivery without accident. The speaker recalled a case in point: The woman had developed anasarca with great albuminuria. She was put upon the aforementioned treatment, with the effect that there was a gradual diminution in the amount of albumen in the urine and water in the subcutaneous cellular tissue up to the time of delivery. The labor was tedious and the patient showed great nervous agitation, but this was due to a rigid os. No convulsions supervened.

Dr. H. A. Cottell asked if a woman who had developed edema and albuminuria, followed by eclampsia, and had escaped with her life, could be expected to go to term in a subsequent pregnancy without great danger. Would the induction of miscarriage be justifiable in such a case?

Dr. Wm. Bailey answered that he believed so strongly in the efficacy of preventive measures in such cases that, while the induction of premature labor might be demanded in an extreme case, he could not see how miscarriage, as a preventive measure, would ever be justifiable. In timely elimination will be found the woman's safety and the physician's reward.

Dr. T. W. Bullock was of the opinion that the occurrence of eclampsia in one pregnancy did not predispose the woman to attacks in subsequent pregnancies. He cited cases from practice in proof of the point.

Dr. D. T. Smith cited a case wherein convulsions came on just after delivery. He prescribed jalap, ζ iv, Rochelle salts, ζ j, in eight powders, giving one every hour, with a drop of croton oil, till purgation was produced. This

was at 9 o'clock P. M. At 1 o'clock A. M. purgation was free. Then chloral, by rectum, was also given, and at long intervals enemata of warm water were used to promote peristalsis. By daylight this woman was free of convulsions, and chatting cheerfully with her attendants. This was my first case. Since, I have treated several like or similar with equally good results.

F. C. SIMPSON, M. D.,
Secretary.

LOUISVILLE SURGICAL SOCIETY.

Stated Meeting, August 11, 1890, Vice-President,
E. R. Palmer, M. D., in the chair.

Dr. W. Cheatham exhibited a gelatinous polyp removed from the anterior portion of the right vocal cord of a lady. Patient had complete loss of voice for four years, which was immediately recovered after the operation. Dr. Cheatham displayed the forceps with which growth was removed; he thought them a great improvement over the McKenzie forceps generally used in such cases.

Dr. W. O. Roberts reported two cases of castration for growths of testicle. One was in a child seven years old. The growth proved to be sarcoma, springing from the epididymis. The other was in the person of a man thirty-four years old, who had been the subject of an enlarging testicle for two years. Diagnosis, fibrocystic disease of testicle. The testicle was removed. The specimen was exhibited to the Society. There were numerous cysts in this testicle containing various colored fluids.

DISCUSSION.

Dr. Turner Anderson mentioned a case of cyst of the testicle, tapped by him some seven years before, which remained cured.

Dr. Ap Morgan Vance had recently seen a man upon whom he had performed castration for the removal of a sarcomatous testicle. The disease did not recur at site of wound, but did recur in the cavernous body of penis.

Dr. I. N. Bloom said that sarcoma of the penis is very rare.

Dr. Rodman: Dr. Bloom is right in saying primary sarcoma of the penis is rare. Gross reports only one such case. The cystic testicle shown by Dr. Roberts was evidently a hydatid.

Dr. Bloom reported the condition of three cases of amputation of the penis operated upon more than a year since. All the operations were done for epithelioma. First, that of a professional gentleman, forty-eight years old. Penis removed one fourth inch back of any infiltrated tissue. Had been well one year; no evidence of recurrence. Patient stated that the loss of the organ did not in any way lessen the pleasures of sexual intercourse.

Case No. 2, aged seventy, was operated upon about one year ago. Unfortunately it was discovered that though the operation was performed well back to the root of the penis, the incision was in infiltrated tissue. It had recurred in the groin as a hard mass.

Case No. 3 was operated by Prof. David W. Yandell; patient aged seventy-eight; recurrence as an ivory hard induration in groin. These cases make me less hopeful of the probable future of such operations.

Dr. Anderson: The only case of cancer of penis which I have seen subjected to amputation recurred in the inguinal region.

The opinion of most of the Fellows was that the probability of recurrence after amputation for carcinoma of the penis was so great as to scarcely to warrant the operation.

The essay of the evening was read by Dr. Bloom; subject, Electrolysis in Skin Affections.

A. M. CARTLEDGE, M. D.,
Secretary.

Reviews and Bibliography.

A Text-book of Practical Therapeutics: With special Reference to the Application of Remedial Measures to Disease and their Employment upon a Rational Basis. By HOBART AMORY HARE, B. Sc. M. D., Clinical Professor of Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania. Philadelphia: Lea Brothers & Co. In one very handsome octavo volume of 632 pages. Cloth, \$3.75; leather, \$4.75.

"The publishers announce the appearance of a new work on therapeutics, planned on lines which will secure for it a leading position as a text-book and work of reference. The author's large experience in experimental, di-

dactic and clinical work has peculiarly fitted him to produce a volume containing all that is latest and best in the application of remedial measures, and to present this material in a way which will not only impress it firmly upon the mind of the student but which will also render it of daily service to practitioners by reason of its definite instructions as to the choice of various agents which may be employed. A feature distinguishing this work from all others is its inclusion, within one cover, of a text-book on therapeutics proper and a text-and-reference-book on treatment. This latter division occupies at least one half of the work, with clear directions for the therapeutic measures to be employed in any given disease, together with the reasons for choice of drugs according to the varying stages and symptoms. It is unnecessary to enlarge upon the advantage to the physician and student of having at instant command a statement of the properties of his agents and of the rational methods of using them, each part being written with especial reference to the other. In the portion of the work dealing with treatment the author has secured the assistance of gentlemen well known in connection with special subjects. Thus, Dr. Barton Cooke Hirst writes upon treatment of diseases of the puerperal state; Dr. G. E. De Schweinitz upon treatment of diseases of the eye; Dr. J. Howard Reeves upon treatment of diseases of the throat and nose, and Dr. Edward Martin upon antiseptics and the treatment of venereal diseases. From these considerations it is easy to justify the confidence with which the publishers look forward to the future of this work."

Abstracts and Selections.

RECOGNITION OF BLOOD IN MEDICO LEGAL INVESTIGATIONS.—Klein, in the *Zeitschrift für Analytische Chemie*, publishes an article on the recognition of blood in medico-legal investigations.

For the extraction of blood stains Klein recommends water saturated with carbon dioxide (Struve's process) as giving the best results. The stained spot is cut out, placed in a test-tube with two or three cubic centimeters of distilled water, and treated with a slow stream

of carbon dioxide. Stains which are only a few hours old are usually completely extracted in five to ten minutes; those up to two weeks old require fifteen to twenty minutes; those up to one month, about thirty minutes, and those six to eight weeks old, from thirty minutes to one hour. The whitish or yellowish masses of fibrin are left unaffected. The clear, yellowish or brownish-colored solution thus obtained is examined spectroscopically. In the case of stains extracted immediately after drying, the two absorption-bands of oxyhemoglobin in the yellow and green portion of the spectrum are alone visible. If the spectrum is shaded up to the red, the methemoglobin band in the red is easily recognized. The intensity of the absorption-band in the red increases with the age of the stain, and in stains fourteen days to one month old it is nearly as intense as the bands in the yellow. Stains five or six months old give solutions in which the band in the red is, at times, the only one visible; and this was always the case in stains six to eight months old. Such old stains, after treatment with carbonic-acid water for some hours, still leave behind a brownish-colored residue, which, freed from adhering fluid by means of blotting paper, gives up to glacial acetic acid or to ammonia after about ten minutes' treatment, a brown coloring matter whose acid solution in thick layers shows plainly the absorption-band of acid hematin. Both the ammonical and acetic-acid solutions, when treated with ammonium sulphide and twenty-per-cent soda solution in slight excess, give the spectrum of reduced hematin.

Solutions of old blood-stains in carbonic-acid water, which have a reddish-brown color and show the methemoglobin band in the red, are immediately changed by treatment with an aqueous solution of hydrocyanic acid (1-2 drops of a 1-1,000 solution, or 12-15 drops of a 1-10,000 solution). The solution has a reddish tinge, and on spectroscopic examination only the bands in the yellow and green are visible, the methemoglobin band having disappeared. In place of this is a faint shading of the spectrum between the positions of the two oxyhemoglobin bands. Solutions of fresh blood stains are apparently unchanged by hydrocyanic acid. The action of hydrocyanic acid possibly affords a means of determining the age of a given stain. For this purpose, the relative intensity of the absorption-bands in the red and green is determined; the band in the red is then obliterated by the action of hydrocyanic acid; the solution is then examined in a layer so thick that the violet end of the spectrum is shaded, when a conclusion may perhaps be drawn, in regard to the amount of

unchanged oxyhemoglobin, from the intensity of the bands in the yellow and green portions of the spectrum. Solutions in carbonic-acid water which show the absorption-bands of oxyhemoglobin give, on careful treatment with ammonium sulphide, the spectrum of reduced hemoglobin. If this solution is shaken with air the oxyhemoglobin bands again appear. Finally, if a few drops of soda solution are added the spectrum of reduced hematin is obtained.

If the stain can not be removed by scraping, one can, after the spectroscopic examination, precipitate a small portion of the carbonic-acid solution with suitable reagents—for example, chloral hydrate, zinc acetate or tannin—and employ the precipitate for the production of hemin crystals. The author has made a special investigation of the process recommended by Ferry de la Bellone. The carbonic-acid solutions gave immediately, upon the addition of chloral solution, a rose-colored turbidity, and later a similar rose-colored precipitate, which settled completely after some hours. A drop of this precipitate gently warmed on a glass slide furnished a coagulum in which, after treatment with tuchsin and acetic acid, numerous blood-corpuscles were detected on microscopic examination. The test for hemin crystals was equally satisfactory. A small quantity of the precipitate dissolved in ammonia, and treated with a few drops of a solution of ferrous sulphate and tartaric acid, gave a solution which exhibited plainly the absorption band of reduced hematin. An acetic acid solution of the precipitate furnished an equally satisfactory absorption-band of hematin. The chloral precipitate, dried over sulphuric acid in a desiccator and kept for six months, furnished, on proper treatment, hemin crystals and the spectra of hematin and acid hematin as satisfactorily as did the original moist precipitate. The precipitate obtained by the addition of zinc acetate to a carbonic-acid solution of blood stains furnished, on proper treatment, the spectrum of hematin in acid solution, and of reduced hematin; but did not, as a rule, afford hemin crystals.

If the fibrine left after extraction with carbonic-acid water is submitted to the action of water saturated with carbon dioxide for twenty to twenty-four hours, and the residue is then examined microscopically, it is possible at times, especially if the blood is dried in a thick layer and not on a porous surface, to recognize the blood-corpuscles, normal in shape and size. These could be satisfactorily measured after they were treated from ten to twenty minutes with a one or two-per-cent solution of perosmic acid, or after they were colored with an

aqueous fuchsin solution. An excess of the fuchsin solution can be removed by washing with water containing carbonic acid. The diameter of blood-corpuscles from stains varied after this treatment, in human blood between 0.00748 and 0.0078 mm., in the blood of the ox between 0.00592 and 0.00624 mm. In the case of stains more than six to eight months old, from which carbonic acid fails to remove the coloring matter, other solvents may be employed; for example, dilute soda solution, acetic acid, etc.

The author describes experiments in which the foregoing process with unimportant variations was employed. In one of them some coarse sand was mixed with five per cent of blood and examined ten years later with satisfactory results.—*Boston Medical and Surgical Journal*.

CONCUSSION OF THE SPINE AND BRAIN.—The following important discussion on the concussion of the spine and brain is taken from the proceedings of the American Medical Association:

Dr. B. A. Watson, of Jersey City, read a paper on "Concussion of the Spine and Brain." Asserting his intention of following Erichsen, embracing in the term "concussion" all morbid conditions arising primarily or secondarily from the application of concussive force to the brain or spine, he described the various positions in which such injuries could be inflicted. The natural curves of the spinal column and the relations of the cord exerted an important influence, both in the efficient protection of the organs against such injuries, and on the character of such injuries when inflicted. In studying such lesions careful attention must be given to these as well as to the strength, direction, and site of application of the concussive force, also the leverage and superincumbent weight of the body. He then analyzed the results of a number of experiments which he had performed on dogs, with the object of discovering the exact effects of concussion injuries. The total number was 141, of which only 4 showed cerebrospinal lesions. Rupture of the vertebral ligaments, 11; fractures of the vertebral bodies, 5; stretching of the vertebral ligaments, 4; ecchymosis into the psoas muscles, 5. It was shown that the concussive force exerts its greatest effects in the cervical region.

Discussion. Dr. J. G. Carpenter, Stanford, Ky.: Injuries of the spinal column are common throughout the entire country; injuries to the spinal cord are very rare. I agree with the reader in that. It is a common thing, when persons receive injuries to the column, for members of the profession to locate the lesion in the

cord, when in reality the lesion is in some other part of the vertebrae. The cord is so well protected that it is not injured in such accidents. There are certain symptoms which, if they be present from the beginning, may enable us to recognize injury to the cord, but if they develop later it is difficult to ascribe to them their proper value.

Dr. W. H. Pancoast, Philadelphia: The question is a serious one medico-legally. I believe there is such a thing as concussion of the spine. The spinal nerves and other attachments to the cord render it sufficiently immobile to receive concussion of more or less severity in accidents. I was struck with the reader's reference to the stretching of ligaments. I hold that ligaments do not stretch. That is a phraseology which leads to confusion. Ligaments will hold the bones until they break.

Dr. W. P. King, Kansas City, Mo.: I believe that Erichsen did the profession much harm when he presented his book on Railroad Spine. I also believe that the spinal cord is one of the best protected organs in the body, and that it is about the last one to suffer injury in case of accident.

Dr. J. B. Murphy, St. Paul, Minn.: This subject comes up in the courts more than any other. I have had four cases of fracture of the spine from railway injury in the last two years. Where the body becomes paralyzed below the injury, my cases die. I don't know how others cure their cases. In the other cases the best liniment is a settlement. It is seldom that the cases are genuine.

Dr. Hoadley, Chicago, Ill.: One of the gentlemen told us that it was impossible for ligaments to stretch, that the well-formed spinal column could not stretch, and therefore it was impossible to produce concussion of the cord in this way. I agree that it can not stretch; while there is proper vital tension this is so. But if you stretch the canal by inducing atmospheric pressure, you can injure the cord in that way. This can be done when the person is in a lax, atonic, debilitated condition. The stretching of the column under such circumstances creates a vacuum, and injury to the cord is the result.

Dr. S. J. Coiu, of Dakota, requested a diagnosis for a case which he related. There was entire loss of sensation and paralysis of the extremities, but no evidence of injury to the bony structures. It was the result of falling while in the sitting posture.

Dr. Von Quast, Kansas City, Mo.: Dr. Murphy says that all of his cases die. I have such a case who has been living for two years. Dr. Jackson diagnosed a displacement of the vertebrae. I trephined the spinal column and removed two segments of the dorsal vertebrae,

with adhesions. I closed the wound and placed a plaster-of-paris jacket on him, and kept him completely extended. There has been improvement in both local and general condition.

Dr. B. A. Watson: I am opposed to so much theory in regard to this question. It has long been asserted that concussion of the brain might take place without the existence of any pathological lesions. I don't believe in that assertion. I believe that in all such cases injury can be demonstrated to a certain extent. As to stretching of ligaments I know this from observation: increased mobility between the vertebrae can be produced without rupture of the ligaments. Repeated dislocation at the shoulder shows to what amount of stretching to which ligaments may be subjected.—*Jour. Nat. Ass'n R. R. Surgeons.*

THE MODE OF ACTION OF PATHOGENIC BACTERIA.—Although the "germ theory of disease" is now generally accepted, and the micro-organisms themselves have been demonstrated and cultivated, little is yet known about their mode of producing diseases in their host. Various theories have been advanced, but no definite result had been obtained until quite recently. Roux and Yersin were the first to make any discoveries; they experimented with the diphtheritic bacillus of Löffler. They found that in cultures of this organism a "poison" existed, soluble in water, which possessed the same properties, when injected into animals, as the pure culture itself, producing acute nephritis, fatty degeneration of the liver, inflammatory edema at the site of inoculation, and paralysis of the hinder extremities. The poison acted slowly, the local symptoms only appearing after several days. They obtained the poison by filtration of the broth cultures through a Chamberland (porcelain) filter, and evaporating the filtrate in a vacuum. They also found that this poison is far more abundant in old cultures than in recent ones; that it is precipitated by alcohol, and that it is destroyed at 100° C., and its virulence weakened at a temperature of 58° C. Brieger and C. Frankel have confirmed these experiments and extended them in many ways. They likewise selected Löffler's bacillus for investigation. For the exhibition of the specific poison they cultivated it on ordinary peptone broth, or in broth which had been mixed with from four to five per cent of glycerine and ten per cent of serum obtained from ox blood. The culture was filtered through a Chamberland filter, the filtrate evaporated to one third of its original bulk in a vacuum at a temperature of 30° C., and was then treated with ten times the quantity of absolute alcohol with a few drops of concentrated acetic acid. The mixture was allowed to stand for twelve

hours surrounded by ice, and then filtered, the precipitate being dissolved in water and again filtered. The filtrate was then evaporated to dryness in a vacuum, and a light amorphous mass, snow white in color, remained. This substance gave the reaction of a proteid, allied to serum albumen. It was insoluble in alcohol, and precipitated by strong mineral acids, ferrocyanide of potassium, and acetic acid. It also gave the biuret reaction, the red coloration with Millon's reagent, the xantho-proteid reaction, and turned the polarized ray to the left. This substance was extremely poisonous, and when injected into animals produced the same symptoms as the culture. Brieger and Frankel found a second proteid in the filtrate, allied to the first in its chemical composition, but not poisonous. The above observations are a great advance in our knowledge of bacteriology, but even more valuable work has been done by Dr. Sidney Martin for the Local Government Board, the results of which he read before the Royal Society on May 22d of this year. Dr. Martin chose the anthrax bacillus for his investigations. He cultivated it on pure alkali-albumen, filtered this through Chamberland's filter, and proved, by means of the microscope and further cultivation experiments, that the filtrate contained no bacilli or spores. He obtained two poisonous proteids—albumoses—which produced in mice local edema, and in larger doses a slow death in stupor and coma. But here, however, he went further than the German observers; he found also an alkaloid similar in action to the anthrax albumoses, but much more powerful. The chief chemical characteristic of the purified albumoses, according to Dr. Martin, is their strong alkalinity in solution. As the alkaloid is a strong base and alkaline, he suggests that the alkalinity of the albumoses is due to the alkaloid being in a nascent condition in the albumose molecule. The alkaloids form crystalline salts in the forms of needles and prisms with mineral and oxalic acids. The importance of these observations can not be too strongly commented on. They are the first of what will probably be a long series of experiments, and will greatly advance our knowledge of micro-organisms, and happily lead to improved methods of treatment.—*London Lancet.*

AN ANOMALOUS CASE OF SALIVARY CALCULUS—Edmund Owen writes in *London Lancet*: A lady recently came under my care for a troublesome but painless swelling of the left cheek. The medical man who sent her to me suggested that it was a case of distension of a greatly dilated parotid duct, possibly caused by a salivary calculus. Unfortunately this

gentleman did not accompany her on her visit to me, and on the most careful examination I could detect no calculus, but found the cheek of that side somewhat prominent and unsightly. The lady said that she had been bothered by a swelling in that cheek ever since she was four years old, and that sometimes after a meal it was much more conspicuous than it was at that time. She was determined to have something done for the swelling, and I was content to hold my diagnosis as to the exact nature of the soft tumor in suspense until I could make a thorough exploration, which I did a few days later, Dr. Prickett kindly helping. There was then a rounded, doughy swelling of the one cheek, but no calculus was discoverable. Anesthesia having been produced, and the jaws being separated by Mason's gag, an incision was made through the mucous lining of the mouth and the buccinator, a lobulated piece of yellow fat at once protruding. Gentle traction being made on this, a lipoma of considerable size readily left its bed between the buccinator and the masseter muscles. The cheek was then flat, like the other. It seemed as if no further treatment would be required, and nothing more was attempted. Within a few days, however, it became evident that the patient did not share our favorable view of the case. She said that on several occasions the cheek had swollen as badly as ever. Never happening to see the cheek, however, when swollen as she described, I thought it not improbable that her imagination supplied her with such evidence as I failed to discover. She was therefore advised to return home and to apply again should she meet with further inconvenience. In a short while she duly presented herself, and directed attention to a small, hard substance, which shifted its position over the masseter; it was evidently the salivary calculus of which her medical attendant had spoken. An attempt was promptly made to extract it through the mouth by reopening the old wound; but on introducing a pair of forceps the concretion slipped away; and so effectually concealed itself that further search for it on that occasion had reluctantly to be abandoned. On a subsequent occasion on which the calculus was discovered I leisurely examined it from the outside of the cheek, and found that the limit of its journey forward was just beyond the hinder border of the masseter, and that with the slightest touch it slipped back into a dilatation of Stenson's duct, which formed a wide chamber behind the angle and ramus of the jaw. From this pouch the calculus could be swept out by firm pressure. Sometimes it was no easy matter to bring it out again, as it hid itself on the inner aspect of the mandibular

angle in the capacious chamber. Having been twice disappointed in the treatment of the case when operating through the buccinator, I determined to cut straight down on to the calculus through the cheek, having chased it forward and secured it by the finger pressed over the hinder part of the masseter. In this way its extraction proved a simple matter. The skin wound, which was closed with horsehair sutures, healed by first intention, giving no trouble whatever as regards leakage of saliva, and leaving a scar which, from the patient's point of view as well as the surgeon's, is now hardly noticeable. The calculus was a phosphatic concretion of the size and shape of a small date stone.

Remarks. No one who has carefully dissected the face can fail to have noticed the pad of yellow fat which is lodged between the masseter and buccinator, the little pellets of which obeyed the slightest touch of his forceps. But in the case under consideration the mass of fat far exceeded the normal amount, and when drawn out through the mouth constituted a lipoma of a very respectable size. Moreover, the swelling which had previously disfigured that cheek had so entirely disappeared that I felt justified in saying that the operation would prove entirely successful. Probably the irritation caused by the salivary calculus had brought about an overnutrition of the fatty pad and so determined its hypertrophy, the other cheek remaining of normal size and appearance. Certainly the removal of the calculus alone would not have restored the symmetry, and had I extracted the concretion on the first occasion I might have hesitated to proceed to the ablation of the buccal lipoma, even if I had made a correct diagnosis of the nature of that swelling. Thus, as possibly not infrequently happens, failure on the part of the surgeon either in the way of diagnosis or treatment worked for the good of the patient. As regards the removal of the calculus from the outside of the cheek, it is not an operation which one would generally recommend lest a troublesome salivary fistula should result, but, seeing the perfect way in which the wound healed, the danger of such a contingency is probably overrated.

RHINOSCLEROMA.—An excellent summary of this rare disease is given by Wolkowitsch in the *Centralblatt für Chirurgie*, No. 23, which will well repay perusal. This complaint was first described by Hebra in 1870. It is characterised by a hard swelling appearing in the nose and its neighborhood, by a very chronic course, and resistance to remedies. Cases have been recorded from all parts of Europe, but they

have chiefly occurred in the eastern parts of Austria and the southwestern provinces of Russia; a few cases have also been observed in Central America. Wolkowitsch has collected seventy-six cases in addition to eleven recorded by himself. The disease commences very insidiously. The most common site of origin is the deeper parts of the nose and occasionally the pharynx and larynx; in one case it started from the hard palate. Wherever it may have originated, the middle of the nose very seldom escapes, and the disease generally spreads to the following parts: the mucous membrane and subjacent tissues of the nares, the upper and lower lips, the tissues around the upper jaw, and occasionally even to the lachrymal tract and Eustachian tube. The progress is continuous and symmetrical. Of 85 cases the mucous membrane of the nares was attacked in 81, the cutaneous coverings of the nose in 74, the pharynx in 57, the larynx in 19, the trachea in 5, the upper lip in 46, the upper jaw in 16, the hard palate in 17, the tongue in 4, the under lip in 2, and the lachrymal tract in 5 cases; the ear was affected in 1 case only. The local changes consisted in the formation of small nodules, or sometimes plates, as hard as cartilage, some being diffuse and others sharply circumscribed. These usually had their origin in the deeper layers of the skin and mucous membrane. There was a considerable amount of brawny swelling around the nodules. A retrograde metamorphosis occurred in some cases, leaving hard and contracted fibrous tissue, so producing more or less distortion of the features and constriction of the upper respiratory passages. The nodules never broke down unless some complication occurred, or as the result of irrational anti-syphilitic treatment. The subjective symptoms were few. At the first there was usually an ordinary nasal catarrh; there was loss of smell, but the patient suffered very little pain throughout. Occasionally, however, fissures formed in the lips, producing considerable difficulty in speaking and eating. If the larynx or pharynx were much affected, dyspnea was marked, often producing very serious symptoms. The disease was exceedingly chronic, lasting fifteen to twenty or even twenty-six years. The diagnosis from syphilis was often difficult. The only treatment of any avail was excision. A microscopical examination of the tissues was made in ten cases. The most marked histological features were a round-celled infiltration and a large amount of fibrous tissue, together with numerous larger cells, and the formation of small round spaces—"vacuoles"—due to hyaline degeneration of the large cells. The hair follicles and sweat glands were atrophied.

Micro-organisms were always found. They stained by Gram's method, and morphologically could not be distinguished from Friedländer's pneumococcus. They occurred in large numbers, and from their constant occurrence they seemed to bear an etiological relation to the disease, although inoculation experiments were unsuccessful.—*London Lancet*.

THE DIETETIC TREATMENT OF TROPICAL DIARRHEA.—"The affectation and empiricism of regarding particular articles of food as of universal application must be avoided;" so writes Dr. Morehead in reference to dieting for bowel complaints in India. Recently I have seen many statements by eminent authorities that milk and milk only must be given in hill diarrhea. Hill diarrhea is described as characterized by numerous fluid evacuations, usually copious, pale in color, pea-soupy, without blood or mucus, but curdled and frothy, and often bad smelling. The type is one with which physicians at Indian hill stations are familiar. It is perhaps less common in Kashmir, as the journey here is one that only the comparatively robust would undertake; but I have seen a considerable number of cases. The *dictum* that milk is the only permissible diet contains some truth, but with many exceptions. The following is a striking example:

Captain A., after a very prolonged fever, started for Kashmir. On the journey he picked up strength; but the day after crossing a lofty pass (11,500 feet) diarrhea began. His companion was a doctor of the Indian medical service, and treatment was at once commenced. The latter having with him the *Lancet* of April 13, 1889, with a paper on the subject by Sir J. Fayrer, a milk diet was ordered, and persevered with in an intelligent manner. After a month's treatment the patient was in no way better. He then came under my care. The diarrhea was of a typical character. The patient dressed warmly, rested all day, and was scrupulous in following the directions given. For three weeks I treated him without any substantial gain. The copious yellow, frothy fluid discharge continued two or three times a day. At first one or two drugs (such as ipecacuanha, rhubarb and calomel) appeared beneficial. I began to think of sending the patient to a lower altitude and warmer climate; for Gulmory is 9,000 feet above the sea. Before doing this I resolved to try a complete change of diet; not to allow a drop of milk, but a simple meat diet with a little toast and weak tea. The day the change was made the diarrhea stopped, and did not recur. A week later all restrictions were withdrawn, and then Captain A. started on a

mountain journey, undergoing cold, fatigue, etc., without any harm. The practice of changing diet is familiar to all. In this case, I believe, it was suggested to me by the following sentence in Dr. Lauder Brunton's Croonian Lectures: "Another mode of destroying the activity of bacteria is to starve them out by substituting a new diet for that for which they are accustomed. For this reason Vaughan recommended that in infantile diarrhea, beef-tea rice-water or pure water should be given instead of milk for some days, until the bacteria should have died out." In the case of Captain A. much of the fluid appeared due to deficient skin action. The indication appeared to be to diminish the amount of ingested fluid, and to supply the gastric glands with healthy occupation. Whatever the *modus operandi*, a striking result was obtained. I have known many other cases in which milk diet has been less successful than a mixed diet. In short, it does not appear to me either scientific or satisfactory to reduce the treatment of hill diarrhea to a mechanical unvarying administration of milk.—Arthur Neve, *Ibid.*

PAROXYSMAL PULMONARY EDEMA IN CHRONIC ALBUMINURIA. Pulmonary edema in cases of chronic renal disease is an important factor, and Professor Bouveret, of Lyons (*Revue de Méd.*, pp. 241-251, 1890, and *Practitioner*, August, 1890), is anxious to call attention to a paroxysmal form which seems to him, though rare, not to have received sufficient attention. The characteristic symptoms are a rapid onset of dyspnea, with a very abundant albuminous expectoration. Such attacks recur rapidly, ending either in death or in sudden and complete relief. Dr. Bouveret has met with only two cases, both of them in patients with chronic interstitial nephritis. In the first, a man, aged sixty-two, who had long-standing granular kidney, the dyspnea was very severe, though irregular, before death, with tension of the radial pulse throughout. The sputa amounted to about three pints *per diem* of a frothy and highly albuminous liquid, with occasionally a trace of blood in it. Patient was bled and cupped, and treated with strong hydragogue purgatives, but died in asphyxia, at a temperature of 104.2°. The necropsy showed much destruction of the cortical tissue of the kidneys of old standing, extreme cardiac hypertrophy and dilatation, and a remarkable abundant edema of the lungs, with no broncho-pneumonia. In the second case, a man, aged forty-five, there were in two years three crises of dyspnea and abundant albuminous expectoration, followed in each instance by a rally. In the last and most violent crises, which came on

very suddenly, and without apparent reason, when he was going to bed, and lasted only four hours, he coughed up about three pints of fluid. The day after the attack he felt strong enough to get up and do some work. He was probably in an early stage of contracting interstitial nephritis. At the time of dyspnea and abundant expectoration very little urine, and that of high specific gravity, was passed; at the other times it was abundant and of low specific gravity. His heart was not much hypertrophied, and its valves were efficient. Fräntzel, in discussing similar symptoms, is inclined to attribute them to a loss of equilibrium of energy between the right and left ventricles; the left ventricle in fact giving way suddenly under its constant heavy work. That is a view supported by Dr. Welch, but quite inconsistent with the high arterial tension in the first case mentioned, and with the normal tension and very slight cardiac hypertrophy in the second case. Professor Bouveret is inclined to suspect a vaso-motor paralysis of the pulmonary arterioles, though he admits he can not point to the nervous origin of this vaso-motor paralysis. He advocates a treatment by bleeding, dry cupping, poulticing the thorax, and administration of hydragogue purgatives and alcohol in large doses, in extreme cases of cardiac failure subcutaneous injection of caffeine and ether. In the first case such treatment was adopted without success.—*Boston Medical and Surgical Journal*.

TUBERCULOSIS IN THE FOWL.—Dr. Angelo Mafucci, of Pisa, has made some important observations upon tuberculosis in fowls (*Centralbl. für Allg. Path. u. Path. Anat.*, No. 13), which go some way to show that there is an integral difference between that affection and the analogous disease in mammalian animals. The question is obviously of moment in regard to the possibility of transmission of tubercle to man. After giving the results of his inquiry, he says that there are three questions yet to be solved, viz: (1) whether there exists in man a form of tuberculosis, local or general, similar to that of fowls; (2) whether one of these two forms is an attenuation of the other; and if so, which? Hitherto he has failed to transmit by successive inoculation "fowl tuberculosis" from guinea-pig to guinea-pig, or mammalian tubercle from fowl to fowl; and (3) whether the two forms of tuberculosis may have a common origin, modified in the different classes of animals. Nocard states that the fowl can be attacked with bovine tuberculosis, but Mafucci has been unable to confirm this. The facts which he has ascertained so far are as follows: (1) That fowl tuberculosis differs in its cultures from mamma-

lian tuberculosis. (2) That fowl tuberculosis may be well cultivated and retain its pathogenic properties between 37° and 43° C. (3) That the guinea-pig and dog are able to destroy the bacillus of fowl tuberculosis, its inoculation in them often resulting in local abscesses. (4) That the guinea-pig may die of marasmus, without any tuberculous nodules forming, up to within four months after inoculation. (5) That the rabbit may exhibit the general as well as the local form of tuberculosis, but with a special type of structure of the tubercle and a greater quantity of bacilli than occurs in fowls. (6) That tuberculosis of fowls has great power of resistance to physical agents. (7) That the fowl is insusceptible to mammalian tuberculosis.—*London Lancet*.

BRINE AS A PRESERVATIVE.—The Berlin correspondent of the *Medical Press*, July 30, 1890, states that the papers published a short time ago an account of the discovery of numerous bodies of Hungarians who perished 42 years ago in an insurrection. The bodies, nineteen in number, were discovered in a brine pit at Vizakna, in Hungary. The Royal Gerichsarzt, Dr. Heinrich König, of Hermannstadt, published more recently an interesting account of the autopsy made by him, July 6th, on the bodies of those found. The conditions presented were of importance in many respects as regards medical science. In external appearance the whole of the bodies resembled those preserved in the museums in spirit. No trace of decomposition could be detected, the skin was of a grayish-white color, the muscular tissue was rosy-red and felt like fresh flesh. All the intestines and organs, the lungs, heart, liver, spleen, kidneys, bladder, stomach, and intestines were scarcely more consistent in fresh bodies; the brain was hard and dirty gray, as in spirit preparations. The structure of the organs was plainly recognizable to the naked eye, so that they might have served for anatomical teaching. A remarkable fact, as Dr. König remarks, after having been preserved for more than forty-one years.

The colon contained copious yellowish-brown feces, but without odor, and in the bladder yellow urine was present. Crystallized salt was found in considerable quantity in the interior of the bodies, which had been deposited and settled in the various tissues and organs. It was met with even on the inner surface of the uninjured pericardium to the extent of five grams.

SALIPYRIN OR SALICYLATE OF ANTIPYRIN. In a communication made by M. Vigier to the Paris Pharmaceutical Society more than a year

since, attention was called to the reaction which occurred between antipyrin and sodium salicylate. This reaction has been thoroughly investigated by Professor Spica, of Florence, who reports (*L'Orosi*) that the liquefaction of the mixed powders is due not to the formation of salicylate of antipyrin but simply to absorption of moisture from the atmosphere. He also states that he has succeeded in preparing a well-crystallized compound which he considers a salicylate of antipyrin, and which he thinks may prove of therapeutic value. He obtained the salt by gradually adding to a dilute boiling aqueous solution of antipyrin a molecular proportion of salicylic acid (100 parts of antipyrin to 73.4 of salicylic acid). If the solution be sufficiently dilute it remains clear while boiling, otherwise a yellow oily substance will separate out which requires recrystallization from water. The salt is described as occurring in fine colorless crystalline scales, or in flocks formed of very much elongated crystals, the scales tending to group together. These scales are soluble in 25.0 parts of cold and more soluble in hot water, and freely soluble in alcohol, ether, chloroform, and carbon bisulphide. Since the publication of Professor Spica's observations, Dr. Scholvein has stated that this compound has been already tried in a Berlin hospital, under the name of salipyrin, with satisfactory results. Dr. Scholvein also suggested, as a simpler method of preparing the compound, that the components be heated together in molecular proportions, and the resulting crust be dissolved in and crystallized from alcohol. It may also be obtained by shaking together an aqueous solution of antipyrin and an ethereal solution of salicylic acid, when the compound separates out in handsome crystals.—*Druggists' Circular*.

SIMULTANEOUS FRACTURE OF BOTH CLAVICLES.—A railway porter was brought one night some fifty miles to the hospital, under the supposition that he had received severe internal injuries, for his shoulders had been caught sideways between the buffers of two wagons. He was much collapsed, and had great pain at the upper part of the chest. No examination had been made. On admission it was found that the only injury was oblique fracture of both clavicles at corresponding points—the middle of each bone. There was the usual displacement, and as this was most easily and perfectly rectified by lying flat on the back without a pillow for the head, so was he treated, and he presently left with both bones firmly united.

While recording this example of a very rare form of injury I may refer to another which

is equally, if indeed it be not more uncommon, and which I had the opportunity of seeing when dresser at the London Hospital in 1869. A woman was admitted with dislocation of her right clavicle at both ends. I forgot the precise mode in which the accident had happened, but it had been very severe, and the clavicle was separated from its attachments at both ends, and came to lie almost at right angles to its natural position—the acromial end backward, the sternal end forward. The reduction of this dislocation was extremely difficult, and was not entirely successful.—*Herbert W. Page, in London Lancet.*

THE SO-CALLED "NONA."—Dr. Tranjen, of Sistow (Bulgaria), records two cases observed during the month of April, the symptoms of which suggested the condition of which much has been heard of in the lay papers under the name of "Nona." The first was a child two years old, of healthy family, seen in the third week of illness. It appeared to be asleep. It moaned now and then, and cried, and grasped its head; and was said to have been in that state for three weeks. It could be readily awakened, and induced to take bread and milk: often it awoke of its own accord and called for water. The bowels were constipated, and had no motion without castor oil. For urination the child woke up. The little patient was well-formed, and lay on its side with the head thrown back. The large fontanelle was closed; the pupils equal, dilated, and reacting slowly to light; the tongue coated, and the abdomen retracted. There was no rash, no splenic enlargement, and no discoverable organic disease. The temperature did not rise above 101° , and the pulse and respiration were apparently normal. This condition lasted sixteen days; then coma set in, and death two days later.

The other instance was that of a ten-year-old anemic and emaciated girl. Her parents were healthy. She died, with symptoms similar to the other, after seven days' illness. In January she had influenza for three weeks. In April she fell into a sleepy state, with fever and constipation, retracted abdomen, coated tongue, head drawn back, and pupils unequal, dilated, and reacting slowly. She awoke occasionally and drank something, embraced her mother, and then fell asleep again. She did not speak nor ask for any thing. Shortly before death, slight trismus set in. The temperature was no higher than 100.5° , and the pulse and respiration not abnormal.

These two cases reminded the writer of a soldier, who died, after ten days' illness, with the same symptoms, during the influenza epi-

demic in January. The *post-mortem* examination showed well-marked hyperemia of the meninges, an edematous condition of the brain, but no exudation.

Tranjen looks upon these cases as infectious cerebro-spinal meningitis. The signs of irritation were very few, and the prominence of the drowsiness would impress a lay mind very much. The sleep, abnormal in its duration for days and weeks, was otherwise physiological. Clinically and pathologically, the condition was none other than a cerebro spinal meningitis running an unusual course, and resembling pneumonia very much in its relation to influenza.—*Berliner klinische Wochenschrift.*

THE SPINAL CORD IN INFLUENZA.—At a meeting of the Royal Academy of Medicine of Turin, on May 23d, Prof. P. Foà described the lesions which he had found in the spinal cord of a woman who died of influenza. The patient, who was "of middle age," had suffered from the usual symptoms, and the attack was followed by extremely acute bronchial catarrh, and later on by broncho-pneumonia on one side, with hepatization of the other lung. Sections of the spinal cord showed intense hyperemia, its substance being dotted with minute red points. On microscopical examination, numerous hemorrhagic foci were seen in all the divisions of the cord, notably in the upper two thirds of the dorsal and the upper portion of the cervical region. There was recent infiltration of red corpuscles among the nervous elements, which were slightly separated and compressed, but not visibly altered in structure. Some of the vessels were obliterated, and it was in the neighborhood of these that the hemorrhages had taken place. Degenerative changes were also present in places, the axis cylinders being also hypertrophied to five or six times their ordinary size, and the fibers degenerated. These degenerative foci were as a rule independent of the hemorrhagic patches, but in the highest part of the cord the two lesions were sometimes found together. The hemorrhagic foci were chiefly situated in the posterior columns, almost always at their periphery; the degenerative foci occurred mostly in the lateral columns. Neither the gray matter nor the posterior roots showed the least alteration. Dr. Foà thinks that the lesions were due to occlusions of vessels, giving rise in some places to hemorrhage, and in others to alterations in the nutrition of the nerve fibers. He thinks it probable that the occlusion was caused by an accumulation of micro-organisms, but admits that he was unable to verify this conjecture. Examination of the brain was not permitted.—*Maryland Medical Journal.*

The American Practitioner and News

"NEC TENUI PENNĀ."

Vol. X. SATURDAY, SEPTEMBER 13, 1890. No. 6.

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A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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APPALLING HYPNOTISM.

Mesmerism and its twin sister, hypnotism, have been flourishing before the eyes of the scientific world for now nearly a century without bearing fruit for the good of man. It is true that the phenomena exhibited under the power of the mesmerist demonstrate beyond question that the mind of one man may take complete possession of the brain of another, abolishing for the time being the intellection of that other; but aside from this terrible psychic fact, and the light that it throws upon the history of so-called witchcraft, with an implied warning to such fanatics as may be disposed to revive the healthful and holy persecution of witches, the thing is without practical scientific value. As a therapeutic measure, with all due deference to the eminent neurologists who have brought it into note, it must be voted a fad. It is no less a fad than the elixir vitæ of Brown-Sequard; but unfortunately it is far more menacing to society, since its agency is immaterial, and may under favorable psychic conditions be practiced without mechanical device or preparation.

The greatest harm that the fluid of Brown-Sequard could do would be to send a few old paralytics and impotent imbeciles to Heaven

before their time; but the power of hypnotism, possessed and exercised by the wicked, may be used to subvert chastity and besmirch the beauty of young life, if it be not a veritable deadly weapon in the hands of the murderer himself.

The following, quoted by the Weekly Medical Review from the St. Louis Republican, is a startling illustration of how hypnotism may be abused. Such accounts are simply appalling, and call for rigid legislative enactments restricting this measure to strictly therapeutic ends, if mayhap such ends can be found:

"CHATTANOOGA, TENN., Sept. 2. —Several weeks ago pretty and winsome Laura Culver disappeared from her paternal home on William Street. She was but fifteen years of age, but bright and intelligent. For some time past she had complained to her father of being perplexed by the attentions of a strange man. The girl said that he appeared to exercise an influence over her, and that she was afraid of him. The parents paid but little attention to her complaint, until one day, several weeks ago, she disappeared. Laura had been left at home one day in care of the house, but upon her parents' return had left.

"Inquiries among the neighbors developed the fact that a strange man had stood in front of the house, and shortly afterward the little girl came out, and, as if asleep, had walked away with him. The neighbors' attention had been attracted by the man, and they were positive he had not said any thing, and were unable to account for Laura's going with him. Mr. Culver then remembered the girl's statement, and gave the police a description of the man. After a two weeks' search the detectives succeeded yesterday in locating the man and the girl in a house on Highland Park. They arrested the man, who gave the name of Richard Adams, but refused to give further information. The girl was still in a stupid condition, and did not appear to realize what was going on. Physicians were summoned and succeeded in arousing her from the spell. They examined the girl and found that she had been assaulted. The girl states that she knows nothing of what happened after she left home until she returned

two weeks later. The physicians, in view of these circumstances, pronounce the case one of hypnotism."

Notes and Queries.

THE CONTRACT RAILROAD SURGEON AND HIS COMPENSATION.—The old question of the compensation of railroad surgeons again looms up, and this time gives promise of reaching the councils of the American Medical Association. The subject may be looked at from various "points of view," and the personal relations of those who discuss it have much to do with the stand they take. The persons interested in this matter are:

1. The railroad surgeons themselves;
2. The medical profession at large;
3. Those who have an ungratified desire to do railroad surgery;
4. The railroad corporations;
5. The persons who are injured.

In order to do justice to the subject it may be well to consider the aspect which it presents to each of these classes.

1. It may be pretty safely affirmed that, as a rule, railroad surgeons themselves are satisfied with the compensation they receive, whether it be in the form of the much despised annual pass or of a crisp and comely check in addition at regular intervals.

There are certain advantages, apart from the matter of direct compensation, which are duly appreciated. The work is usually congenial and satisfactory; the cases are acute and, so to speak, "clean," and recover readily; there is a large amount of instruction to be gained by the observation and treatment of acute railroad cases by an observant man; a surgeon's skill and readiness are largely enhanced, and consequently his surgical reputation is increased by the treatment of a large number of these cases; in certain localities, particularly in small places, the name of "railroad surgeon" doubtless brings considerable general practice.

The very fact that railroad surgeons continue to hold these positions year after year, and rarely resign of their own accord, is *prima facie* evidence that they at least consider the com-

pensation adequate, whether they value the money, the free transportation, the experience, or the added reputation which the position brings. Any railroad surgeon who makes claims to the contrary stultifies himself by their very statement.

2. The medical profession at large are of course interested in establishing proper remunerative rates of compensation for medical and surgical services. But so varying are these services, so varying the skill of those who render them, and so varying the circumstances of those to whom they are rendered, that a fixed price-list or fee-bill is out of the question. Practically all that can be done in this direction is for the physician of each locality to agree on an average rate of compensation, leaving each individual to increase or diminish it according to the ability of the patient to pay. After all, the whole matter is settled by that arbiter of all other commercial transactions—the law of demand and supply.

Now, if the medical profession of a community find one of their number doing a certain class of work below living rates, the part of wisdom is to let him go on doing the work and starving on the proceeds. This takes for granted the supposition that the compensation provided by railroads for their surgeons is less than could be collected from the patients themselves, were they to employ their own surgeons. Few who are at all conversant with the details of this work will doubt that railroad surgeons as a body now receive more direct compensation for their work than would accrue to the profession at large were the collections made from injured men.

If this is true, the profession generally have no grounds for complaint. If even it were not true, the profession should consider the vast amount of professional work which is done by contract for lodges, societies, municipalities, townships, mills, mines, workshops, and families, the great bulk of which is done at much lower rates than railroads pay; and, considering this, they should reserve their complaints against railroads and railroad surgeons till the rates for all other contract work can at the same time be raised by some edict of suspension of the law of supply and demand.

Meanwhile, if any individual member of the profession, who at the same time holds a position as railroad surgeon, thinks himself too poorly paid, whether it be by a yearly pass or by a good round sum, let him strike his own blow for his own good and the elevation of the standing of the profession by "striking for higher wages." If he does this, whether he succeed or fail, we must respect him; but how can we do this if he clings to the skirts of railroad surgery and constantly lifts up his voice in lamentation at the meagerness of his pay, but has not the nerve to let go and drop into the ranks of private practice?

3. Probably the greatest agitation of this question is made by those who would be railroad surgeons if they could secure the appointment. They have claims for consideration here only as belonging to the profession at large, and in this capacity their claims have been above considered.

4. As to the railroad corporations themselves, it may be said that they are under no legal obligations whatever to furnish surgical treatment for their injured men; and if they consider it for their interest and for the interest of humanity to employ competent surgeons for a fixed compensation to attend their injured, they have an undoubted right to purchase that service at the lowest market rate. It is pretty generally admitted that in this, as in most things, railroad corporations buy the best in the market, believing it to be the cheapest in the end.

5. Those who complain of contract surgery in general, and railroad surgery in particular, overlook the most important interest involved, namely, the lives and future usefulness of the injured men. It is certainly true that, taken as a whole, railroad surgeons are more capable of treating railroad injuries than any other class of practitioners; and if the companies are willing to provide their injured with the best surgical treatment, and the unfortunates are willing to accept such timely aid, it is a conspicuous example of an arrangement conferring the greatest good on the greatest number, and should meet with no objection or criticism except after mature deliberation by those competent to decide.—*Journal of the National Association of Railway Surgeons.*

SENSELESS PANIC OVER LEPROSY.—The New York Medical Journal, August 2, 1890, says: From this week's report of contagious diseases in New York it will be seen that a case of anesthetic leprosy has been reported. The patient is a young man, aged twenty years, a native of Central America, who has been attending school in this country for more than a year. The symptoms of the disease did not appear until after an attack of influenza during the past winter, and at first the true character of the complaint was not recognized, but when a definite diagnosis was made and the case reported to the Board of Health the patient was forcibly removed, by order of the board, to North Brothers Island.

We must deprecate this action of the board, that seems based upon the fear of leprosy that probably most persons entertain as a result of biblical reading. Why should the treatment indicated in Leviticus be followed in this disease, while many of the other sanitary injunctions of the Old Testament are properly ignored? Should our treatment of such cases be traditional or scientific? True, this action of the board has two precedents in this country; one, the instance in which the Philadelphia Board of Health exercised its authority in forcibly confining two lepers in 1888, and the other the one in which in St. Louis an unfortunate leper was taken from his friends by order of the local Board of Health and confined in a lazaretto until he died. In the latter case a slight effort was made to secure the release of the patient by *habeas-corpus* proceedings; and the tenor of the popular impression regarding the disease can not be better illustrated than by the fact that there was a stampede from the court-room, even the wearer of the judicial ermine sharing in the fright, when it was learned that the leper in person had been brought into court. Had a consumptive been brought into the room it is needless to say that no such alarm would have been created; and yet, conceding the most ultra virulence to leprosy and the justifiability of the most extreme views held by leprophobists, it can not be held that the disease is as contagious as tuberculosis, or that it causes even a small percentage of as many deaths as the latter.

The sanitary regulation authorizing inspectors of the Marine Hospital Service to exclude leprosy immigrants is an excellent one, because such persons will probably become public charges. Nevertheless, even with this regulation, we doubt if an American citizen could either be legally excluded from the country or be confined as a virtual prisoner in a lazaretto, because he had unfortunately acquired leprosy during a residence in certain foreign countries. At a recent meeting, in June last, of the representatives of the State and local Boards of Health, at Nashville, an effort was made to obtain the adoption by that body of regulations requiring the isolation of lepers in the United States. The evidence that supported the theory of the acute contagiousness of leprosy in this country was considered so inconclusive that this association of experts declined to adopt the regulations advocated by one or two radical members.

In Minnesota, South Carolina, Florida, Louisiana, and California there are cases of leprosy. In the last-named State the patients are principally Chinese, and, on account of the susceptibility of that race to the mild contagion of the disease, lepers are isolated. But in none of the other States named has any attempt been made to isolate the patients; yet there is no evidence that the disease has increased in any of them during the past century, and there is but a single authentic record of the disease being acquired by association in this country. This latter case was in a Roman Catholic priest attending leprosy patients in Charity Hospital, New Orleans; it was supposed that he acquired it by the custom of inunction of the dying. He was an American Father Damien, who received no honors in his own country.

That the bacillus lepræ can cause the disease by inoculation is uncertain, for in the case of a condemned criminal inoculated in 1884, in whom the leprosy bacilli were found in the cicatrix in 1885, he did not show signs of general infection until 1889. Again, consider for one moment the many years that Father Damien was exposed to the disease before he acquired it. Besides the micro-organism, certain factors of climate, environment, and food seem requisite; possibly, besides, what Jonathan

Hutchinson has designated as "some very special kind of poison of rare occurrence taken in connection with food." Certainly climate exercises a potent influence in keeping the disease in abeyance, as has been proved in cases of Englishmen that have acquired leprosy in colonial possessions and have lived in fairly good health on returning to England.

To deprive an individual of his liberty is a very serious matter, and, in view of the fact that contagious diseases of far greater danger to public health than leprosy are treated at the domicile, there seems to be no good reason for such arbitrary, though well-intended, action as that taken by the Board of Health. If experience with the West Indians that are the lepers in Florida, the Acadian descendants that constitute the Louisiana lepers, or the Norwegian lepers of Minnesota, justified a belief in a danger to this community in permitting this patient to reside with his family, the case would be different. But to cite the illustration of a primitive people like the Sandwich Islanders, that have been successively decimated by contagious diseases, and in every way shown their inability to resist diseases less noxious to the white race, or of the unsanitarily situated natives of India, as reasons for our better circumstanced population fearing the spread of a disease that occasionally presents itself among us, is to ignore the therapeutic resources of our profession—for cures of lepers have been reported—and to place as naught the hygienic advantages of civilized communities.

KOCH ON TREATMENT OF TUBERCULOSIS.—In concluding his address on Bacteriological Research before the Tenth International Medical Congress, Dr. Robert Koch said:

I am convinced that bacteriology will one day be of the greatest importance from the therapeutical point of view also. It is true, I look for relatively smaller therapeutical results in the case of diseases with a short incubation period and a rapid course. In these diseases, as, for example, in cholera, the chief reliance will always have to be placed on prophylaxis. I am thinking more of diseases of less rapid course, as these offer more points of attack to therapeutic enterprise. And there is scarcely a

disease which, partly on this ground, partly on account of its far surpassing all other infectious diseases in importance, so challenges bacteriological investigation as tuberculosis.

Moved by these considerations, very soon after the discovery of the tubercle bacilli, I set about seeking for substances which could be used therapeutically against tuberculosis, and I have pursued this search (which has of course been often interrupted by my other occupations) perseveringly up to the present. In the belief that there must be a remedy for tuberculosis, I do not by any means stand alone.

Billroth has, in one of his last writings, expressed himself with all possible distinctness to the same effect, and it is well known that the same object is aimed at by many investigators. It seems to me, however, that the latter have not as a rule followed the right way in their investigations, inasmuch as they have begun their experiment on man. To that I ascribe the fact that every thing which people have believed themselves to have discovered in that way—from benzoate of soda down to the hot-air treatment—has proved to be a delusion. Experiments must in the first place be made not on man, but on the parasites themselves in their pure cultures; even if substances have been found which have the power to check the development of tubercle bacilli in the cultures, man should not forthwith be chosen as the subject of experiment. But the question whether observations which have been made in a test-tube hold good also in living animal bodies should first be settled in animals. Only if the experiments on animals have proved successful should the method be tried on man.

Proceeding according to these rules, I have in the course of time tested a very large number of substances to see what influence they would exert on the tubercle bacilli cultivated in pure cultures, with the result that not a few substances have the power, even in very small doses, of hindering the growth of tubercle bacilli. More than this, of course, a remedy can not do. It is not necessary, as has often been erroneously assumed, that the bacteria should be killed in the body; in order to make them harmless to the body it is sufficient to prevent their growth, their multiplication.

I have proved the following substances to be remedies which hinder such growth even in very small doses (to mention only the most important): A number of ethereal oils; among the aromatic compounds, β naphthylamin, paratoluidin xylin; some of the so-called tar-dyes, namely, fuchsin, gentian, violet, methyl blue, chinolin yellow, aniline yellow, auramin; among the metals, mercury in the form of vapor, silver and gold compounds. The compounds of cyanogen and gold were especially conspicuous, their effect surpassing that of all other substances; even in a dilution of one to two millions they checked the growth of tubercle bacilli. All these substances, however, remained absolutely without effect if tried on tuberculous animals.

In spite of this failure I have not allowed myself to be discouraged from prosecuting the search for growth-hindering remedies, and I have at last hit upon a substance which has the power of preventing the growth of tubercle bacilli, not only in a test-tube, but in the body of an animal. All experiments in tuberculosis are, as every one who has had experience of them has sufficiently discovered, of very long duration; my researches on this substance, therefore, although they have already occupied me for nearly a year, are not yet completed, and I can only say this much about them, that guinea-pigs, which, as is well known, are extraordinarily susceptible to tuberculosis, if exposed to the influence of this substance, cease to react to the inoculation of tuberculous virus, and that in guinea-pigs suffering from general tuberculosis even to a high degree, the morbid process can be brought completely to a standstill, without the body being in any way injuriously affected.

From these researches I, in the mean time, do not draw any further conclusions than that the possibility of rendering pathogenic bacteria in the living body harmless without injury to the latter, which has hitherto been justly doubted, has been thereby established.

Should, however, the hopes based on these researches be fulfilled in the future, and should we succeed in the case of one bacterial infectious disease in making ourselves masters of the microscopic but hitherto victorious enemy in the human body, then it will soon also be pos-

sible, I have no doubt, to obtain the same result in the case of other diseases. This opens up an oft-promised field of work, with problems which are worthy to be the subject of an international competition of the noblest kind. To give even now some encouragement to further researches in this direction was the sole and only reason why I, departing from my usual custom, have made a communication on a research which is not yet completed.

Allow me, therefore, to conclude this address with the expression of a wish that the nations may measure their strength on this field of labor and in war against the smallest but the most deadly foes of the human race, and that in this struggle for the weal of all mankind one nation may always strive to surpass the other in the successes which it achieves.

BLEEDING.—in an interesting inaugural address on the impressions remaining after a general practice of thirty-seven years, Dr. Alfred Freer, in the *Birmingham Medical Review*, says:

There is one old remedy that has, like disease, slain its thousands in divers countries, which I long, nevertheless, to see set up again upon a proper pedestal among the worthies, that is, bleeding. True it is this power was much abused in old days, but we all must have met with cases where the non-exercise of this potent spell has filled us with regret. I am old enough to remember the time when at least every week patients brought rolls of tape which they would pull out of their pocket, saying, with a somewhat dissatisfied tone, "Then you are not going to bleed me, sir?" Phlebotomy has so gone out that is only with bated breath one dare hint at the propriety of its performance. And yet there are many cases which I think might be saved by it. Let me take three or four examples. Years ago I was summoned most urgently to a young butcher supposed to be dying, his own medical attendant being away from home. I found a man not able to lie down, gasping for breath, and suffering from a pleurisy of three days' duration. He begged me to do something, and it was plain that unless speedily relieved he must die. I bled him to sixteen ounces, and it was a treat to see the

poor fellow expand his chest freely and enjoy the relief of the blood flow. From that moment all anxiety was over. Take another, a chronic case, not in my practice, but the circumstances well known to me. A well-to-do man of about sixty, suffering from cardiac valvular mischief, pulmonary congestion, and great edema of legs, ready to die. A practitioner of before 1815, and most unduly devoted to the practice of opening veins, was called in, superseding the regular attendant. He bled the patient with striking benefit. After the operation the much needed diuretics acted like magic. Elated by success, Sangrado repeated the venesection with still more marked relief. A third and fourth repetition, and the patient sank into such a profound anemia that he could not rally. The abuse of the remedy spoiled all. A third example: A year ago I was called to a woman aged fifty-three, generally soddened in beer, who was seized with giddiness, inability to speak to be understood, pain in the head, and incomplete left hemiplegia, while walking. Her speech was always mumbling at best. I bled her to twelve ounces with immediate benefit; and the friends exclaimed, on hearing her talk, "Why, we have not heard her speak so plainly for three four years." With the exception of diminished power in the left arm this woman has practically recovered, and I often meet her going to refresh.

Yet another example in which bleeding gives excellent results. I allude to puerperal eclampsia. What anxiety comes to especially young and isolated practitioners from seizures of this nature? I remember a primipara, white-faced and unmarried, who had violent convulsions in the first stage of labor; my father had bled her freely with much temporary abatement of the fits. In four hours they returned with violence, and on my father's advice I bled again to sixteen ounces, and gave one grain of tartar emetic with one of opium. The convulsions ceased, the confinement proceeding favorably, and the convalescence was uninterrupted. I do not mean it to be inferred that under modern superior light I would adopt such heroic treatment now, but I venture to aver that in many cases of puerperal eclampsia, where the renal secretion is scanty and decidedly albu-

minous, and where there is marked edema of the lower limbs, the withdrawal of some blood from the circulation is a most valuable resource.

Severe epistaxis often gives us a strong hint on this matter, and so does that severer monitor, hematemesis. Many a possessor of a chronically congested liver has been put on his legs again for an indefinite period through having passed through a hematemesis so profuse as to bring him for a time to death's door. We must not forget that the benefit of venesection or the abstraction of blood does not end with itself, but gives opportunity for the introduction of other valuable remedies into the lightened circulation.

THE GRIPPE CONSIDERED FROM A SURGICAL STANDPOINT.—The recent epidemic of *la grippe* has called into requisition the services of the physician rather than of the surgeon, but an article by Prof. Verneuil, published recently in the *Bulletin de l'Académie de Médecine*, shows that the disease presents many points of surgical interest. M. Verneuil points out that in most of the surgical affections caused by the *grippe* the main pathological feature is suppuration. Thus he observed suppurative inflammation of the eye, ear, joints, purulent pleurisy, and pericarditis, the formation of superficial or deep abscesses of the skin and glands, and collections of pus in the antrum of Highmore and frontal sinus. These conditions were treated by appropriate surgical measures, but it was found that the prognosis was less favorable than under ordinary circumstances. This is not surprising, since the *grippe*, like other acute infectious diseases, causes marked depreciation of the patient's general health, and therefore adds materially to the dangers of any surgical operation that may have to be undertaken. Aside from this it was observed that when patients who were in the stage of recovery from an operation were attacked by the disease, the complication gave rise sometimes to serious consequences. M. Vernuel therefore lays down the rule that, excepting the conditions above mentioned, where urgent surgical interference may be indicated, it is better to postpone all surgical measures until the patient has recovered from the *grippe*. Owing to the slow and tedious convales-

cence which characterized the disease, it may not be possible to delay the operation until recovery is assured, and in this case the best that can be done is to improve the patient's general condition as much as possible by appropriate medication.

According to the observations of Drs. Berger and Peyrat, surgical diseases ran the same course during the prevalence of the *grippe* as under ordinary circumstances. On the other hand, Dr. Walther, of the Hospital de la Charité, states that patients who developed the *grippe* shortly after operations in which the wound was not immediately closed, as in the treatment of cold abscesses, exhibited a remarkable slowness of the healing process. Cicatrization was arrested to a certain extent, and was not re-established until several days after the complete cessation of the acute febrile symptoms. In the case of wounds sutured without drainage, healing was not interfered with, but usually two or three days after operation a sudden rise of temperature was observed. The cause of this fever could not be demonstrated, since on removal of the dressings the wound appeared perfectly healthy.

Dr. Demons, of Bordeaux, mentions quite a number of surgical complications of the *grippe* which have come under his observation. Otitis, complicated by suppuration in the middle ear or mastoid cells, was met with in several instances. Severe inflammation of the eye occurred in some cases, while in still others an orchitis was suddenly developed without a previous history of gonorrhea or contusion of the testicle. Fortunately, however, this disappeared as rapidly as it had appeared without going on to suppuration. There was also a formation of abscesses in the axilla, in the iliac region, and upon the leg, although none of the ordinary causes of suppuration could be found to exist. M. Demons states that all wounds in the wards of the hospital were slow in healing and in many instances suppurated profusely. In his opinion, during an epidemic of the *grippe* it is necessary to abstain from all operative procedures, but especially those involving the buccal, nasal, pharyngeal, and respiratory tracts, which are especially apt to be attacked by the disease.

Judging from these observations, the prognosis of the operations performed during the *grippe* is worthy of careful consideration, and, if possible, all surgical measures should be postponed until the patient has recovered from the debilitating effects of the disease.—*International Journal of Surgery*.

NOTICE.—An Army Medical Board will be in session in New York City, N. Y., during October, 1890, for the examination of candidates for appointment in the Medical Corps of the United States Army to fill existing vacancies. Persons desiring to present themselves for examination by the board will make application to the Secretary of War, before October 1, 1890, for the necessary invitation, stating the date and place of birth, the place and State of permanent residence, the fact of American citizenship, the name of the medical college from whence they were graduated, and a record of service in hospital, if any, from the authorities thereof. The application should be accompanied by certificates based on personal knowledge, from at least two physicians of repute, as to professional standing, character, and moral habits. The candidate must be between twenty-one and twenty-eight years of age, and a graduate from a regular medical college, as evidence of which, his diploma must be submitted to the board. Further information regarding the examinations may be obtained by addressing the Surgeon General, U. S. Army, Washington, D. C.

J. H. BAXTER,
Surgeon General, U. S. Army.

Editor American Practitioner and News:

DEAR SIR: As I have received many inquiries regarding my lecture on "Sexual Perversion," announced in your valuable journal, please announce that I will be pleased to send a copy to any physician who will inclose stamp for same.

G. FRANK LYDSTON.

CHICAGO, ILLS., Aug. 25, 1890.

DR. LEONARD J. GORDON, President of the Jersey City Board of Health, has made a suggestion that all telegraph poles on which live electric wires are strung be painted red, that the public may be able to distinguish them.

Dr. Gordon will bring the subject up for discussion at the next meeting of the board.

TWO MEN were instantly killed August 29th, by stepping on a wire which supplies the current to the arc electric lights in the Wheeling Terminal Railway Company's tunnel, at Wheeling, West Virginia. Both men wore thick-soled and hob-nailed leather boots.

SPECIAL NOTICES.

THE NATIONAL MEDICAL EXCHANGE.—Physicians', Dentists', and Druggists' Locations and Property bought, sold, rented, and exchanged. Partnerships arranged. Assistants and Substitutes provided. Business strictly confidential. Medical, Pharmaceutical, and Scientific Books supplied at lowest rates. Send stamp for Monthly Bulletin containing terms, locations, and list of books and appliances. Correspondence solicited.

Address, H. A. MUMAW, M. D., Orrville, Ohio.

SUCCUS ALTERANS.—ELI LILLY & Co., Indianapolis, Ind.: I am fully satisfied your Succus Alterans has no equal as an alterative. I commenced using it on a patient on the 11th of June last. The lady was covered with sores from the top of her head to the soles of her feet, and three bottles have entirely cured her, she thinks, but I prevail on her to continue the medicine for at least six months longer. Yours respectfully,

L. R. POOLE, M. D.

MAYSVILLE, W. VA., Sept. 10, 1889.

R. J. MITCHELL, M. D., Thomasville, Ga., says: I have given S. H. Kennedy's Extract of Pinus Canadensis an extended trial. I am satisfied that it is a greater medicine than it is represented to be. In gonorrhea, leucorrhea, and gleet it acts like magic.

S. H. Kennedy's Extract Pinus Canadensis (white).....2 ounces;
Glycerine..... $\frac{1}{2}$ ounce;
Aque.....6 ounces.

M. Sig: Inject three times a day after urinating.

I also used the Dark in chronic dysentery, with pretty good results. The case of leucorrhea was of eight months' standing. I hope and predict that in the near future every physician will carry a bottle of S. H. Kennedy's Extract of Pinus Canadensis in his saddle-bags.

JOHN MUIR, M. D., Member College Physicians and Surgeons, Ontario, Canada, Ex-Vice-President Ontario Medical Council, says:

"I take pleasure in saying that I have found PAPINE (Battle) prompt, efficacious, and, better still, unobjectionable as to after-effects. A patient, more than usually intolerant of other preparations of opium, has borne it well and derived manifest benefit from its use."

PIERREPONT MANOR, N. Y.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., SEPTEMBER 27, 1890.

No. 7.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

BRONCHITIS.

BY E. S. M'KEE, M. D.

The following is for the most part gleanings from the literature of the subject:

Etiology. Grant¹ furnished a case illustrating the relation existing between gout and bronchitis. On several occasions he had been called to see a man suffering from tenderness in the epigastric region, nausea, marked flatulence with eructations, severe dyspnea and the physical signs of acute bronchitis. The urine was loaded with urates and great prostration was present. A typical gouty inflammation of the great toe supervened, and simultaneously his other symptoms subsided.

Wert² found plastic bronchitis to occur frequently after pneumonia, and in many cases to be associated with grave skin affections. There seemed in one case also to be a relation between the formation of casts and the catamenia.

Pathology. Picchini³ describes the process in two cases of bronchitis fibrino-hemorrhagica which came under his observation. First, a hemorrhage took place in the lumen of the bronchus and a coagulum formed. Around this a little hemorrhage occurred. The epithelium of the mucosa disappeared and a small celled infiltration of the bronchial walls appeared, the mucous *subcutaneous vessels* enlarged, and a hemorrhagic extravasation exuded from

them into the surrounding connective tissue. By this means the bundles of connective tissue were separated; at last there appeared a periglandular small-celled infiltration. The micro-organisms consisted of three different kinds and possessed great vitality, but soon lost their pathological strength.

Stirling,⁴ in his case of plastic bronchitis, found the casts, which were expelled in great numbers, to be white and but a few stained with blood. The majority measured from three to four inches, some as much as six inches in length. As in other cases, most of these come from the small and medium sized bronchi, but in some instances the main branches represent tubes of large size, as it is not at all infrequent to find a diameter of almost half an inch, and fragments even thicker have occurred. They divide dichotomously, and are of such firm consistency as to bear frequent handling with little injury. The majority are solid, some are hollow. They have evidently been deposited in successive layers, and consist of concentric laminae which can be separated when dry. From this formation it is reasoned by this author that a considerable amount of the exudation takes place in the larger bronchi and is drawn into the smaller by efforts of inspiration. As regards chemical composition, they consist of coagulated albumen soluble in alkalies. Under the microscope they showed fibrillar material, in the meshes of which are numerous leucocytes and fat globules, some hemocytes and epithelial cells. Octahedral crystals, said to be similar to those found in bronchitic asthma, have been observed by others, but he had not been able to find the spirals seen by Curschmann.

Causade⁵ reports one of the most remarkable cases of pseudo-membranous bronchitis in med-

¹ Grant, Brit. Med. Journal; Gaillard's Med. Journal, May, 1890.

² Practitioner, August, 1889; Medical Record, November 9, 1889.

³ Picchini, Riv. clin. arch. Ital. di chir. med. I, p. 103, 1889; Schmidt's Jahrb., October, 1889.

⁴ Practitioner, June, 1889.

⁵ Caussade, Bull. Soc. Anat., May 10, 1889.

ical literature. He found, with the aid of chemistry, a special nature of the fibrinous blocks which has hitherto been undescribed, viz., that the syntonine enters into the fibrinous blocks. Histology revealed a structure in these blocks of membrane analogous to the coagulations of aneurisms.

Eklund⁶ reports a case of bronchitis fibrinosa, in which the patient first had hemoptysis, then a heavy sensation in the chest and later succeeded in expectorating some casts with blood. These casts were of a grayish color, were somewhat cylindrical in shape, and had ramifications of varying length from nine to fourteen centimeters. The largest tube was as thick as a goose quill, and it continued in ramifications threadlike in thickness, some ending in loops. No other physical signs of affections of the lungs, pharynx or larynx were present. There was no more cough, pain in the chest, or dyspnea. Ordered opium and acetate of lead. He observed some blood in the expectorations later, but the coughing was insignificant and the patient continued her work. The pharynx was covered with yellow, thick, purulent masses and a dry mucus.

Symptomology. West² found plastic bronchitis characterized by the occurrence of paroxysms of cough and dyspnea, which immediately ceased on expectoration of the casts. The paroxysms are usually preceded and followed by a sort of catarrh. Hemoptysis may be absent or it may be very serious. It usually at once ceases with the ejection of the casts. As a general thing but little pain is present, except that caused by coughing. In acute cases the temperature may arise to 104° F.; in chronic cases it is seldom above normal. Sometimes the onset of an attack is marked by one or more rigors suggestive of pneumonia. As a rule, each attack consists of a number of short paroxysms. It may subside after a few days never to recur again, or may last continuously for ten, fifteen, or twenty years.

Stirling gives an accurate description of the physical signs found in a case of chronic plastic bronchitis: Chest symmetrical; expansion movements exceedingly slight laterally; anteriorly and posteriorly, normal; percussion note

impaired at bases, elsewhere it lacks fullness; breath sounds practically inaudible over front and back; intense hollow blowing over the vertebrae above the level of the scapular spine. In the lower third of the left lung, front and back, friction-like sounds at the end of inspiration, which posteriorly were broken up; these resembled very thick creaking râles. On the right lower third in front some rumbling was audible with inspiration. The cardiac impulse was weak, but definite in the fifth left intercostal space, a little within the nipple line. Heart sounds slightly dull; precordial dullness ordinary.

Treatment. Simon recommends the careful surveillance of the secretions of urine in the management of capillary bronchitis in infants. Urinary suppression may be the principal cause of the dyspnea. If this occurs, he gives digitalis not in syrup or tincture, but 15 centigrams (about 3 grains) of the powdered leaves in infusion three times in twenty-four hours.

Kisch¹³ found pharmaceutical remedies and mineral waters inadequate in relieving a case of chronic fibrinous bronchitis. He considers the malady rare, its diagnosis dependent upon the chemical and histological examinations of the concretions expectorated. He thinks the etiology and treatment to be as yet unexplored territory.

Stirling⁴ in plastic bronchitis commends inhalations of alkalies, especially aqua calcis, alone or with equal parts of water, or with 2 to 5 per cent of carbonate or bicarbonate of sodium in which the casts are soluble. An emulsion of turpentine, copaiba, and oleoresin of cubeb, and inhalants to increase the plasticity of membrane. Removal to a warm, soothing climate would probably be more useful than drugs.

Simon⁷ advises stimulants in children, as champagne, egg-nog, or toddies. He finds quinine most valuable during the entire course of the disease. It is usually administered in from $\frac{1}{2}$ to 5 gr. doses, and is best given as a potion in glycerine with the addition of a little grape syrup. The child is well wrapped in bed and large sinapisms placed to the chest.

¹³ Kisch, *Rev. Gen. de Clinet de Therap.*, July 4, 1889.

⁷ Simon, *L'Abiellé Medical*, June 3, 1889; *Med. News*, June 20, 1889; *L'Union Méd. du Canada*, August, 1889; *Jour. de Med. de Paris*, March 10, 1889; *Concours Medical*.

⁶ Eklund, *Tr. Med. Ass. Univ. Upsas*, vol. 24, 1888.

At the same time he places a cataplasm over the kidneys and also dry cups. The cardiac contractions take on a more regular rhythm and the urinary secretions are restored.

Burmam⁸ recommends the use of iron in its strongest and most astringent forms in bronchitis, when collapse threatens from suspended respiration due to abundant secretion, and thus to imperfect aeration of the blood.

Murrell⁹ highly commends inhalations of chloride of ammonium by means of an apparatus. This has been very successful in his hands, and he cites a number of cases cured by this remedy.

Dembitz¹⁰ recommends apomorphine as an expectorant for infants, instead of ipecac. His formula of administration is: Apomorphine muriatis, gr. $\frac{1}{6}$ to $\frac{1}{2}$; aquae destil. ζ iv; acid hydrochlorat. gtt.v.; syr. simp. ζ j. M. S: Take one teaspoonful every two hours. Collapse need not be feared, and the apomorphia disturbs digestion less than ipecac. He considers musk the respiratory stimulant *par excellence*. He does not allow infants to sleep too long at one time or to lie a length of time in the same position. If crying makes them cough sometimes, it is all the better. The child should be carried about and its position frequently changed, in order that the secretions may be given less opportunity to settle down and occlude any one part of the smaller tubes. Much mucus may be expelled in producing increased movement of the chest walls by means of pressure applied to the chest, like artificial respiration.

Lautier¹¹ relates a number of cases in which success was attained with the essence of pinus pimilio put up in transparent gelatine capsules the size of a small pea.

Flasher¹² recommends the juice of bananas as one of the best remedies in chronic bronchitis, with insufficient expectoration and marked dyspnea. He has never observed bad results to follow its administration. He prescribes a dram eight or ten times a day.

Later the dose can be diminished. He thus advises the preparation of the juice: Cut the fruit in slices, place it in a glass jar, sprinkle with sugar, and close. The jar is then enveloped in straw, placed in cold water, and heated to boiling. It is then removed and allowed to cool, and the syrup poured into small bottles.

CINCINNATI.

MOIST ANTISEPTIC DRESSING.*

BY JAMES WEIR, M. D.

With the society's permission I will give a synopsis of some seven or eight cases of wounds, etc., from my case-book, which were treated strictly antiseptically. I am well aware of the fact that some of you are not believers in the germ theory, and take no precautions to ward off sepsis. To such I offer these cases without a word of comment. They have occurred during the last two months, and are taken at random from my book.

With the assistance of Dr. Luckett I removed from the scalp of Dr. Woolfolk a cyst. Owing to the fact that the hat-band had pressed upon and irritated the tumor, numerous adhesions had taken place. These were broken up and the cyst dissected out. The wound was well washed with a 1-5,000 solution of corrosive sublimate, stitched together with carbolized silk, dusted with iodoform, and dressed with glycerinated iodoform gauze and corrosive sublimate gauze, topped by rubber, paper, and a cotton bandage. The wound had almost entirely healed when the dressings were removed on the fourth day. There was one minute point that healed by granulation. The doctor attributes this to irritation of the wound caused by movements of head on the pillow during sleep. There was no pus, and the dressing was scarcely stained by the small amount of serum.

Henry M. had received a violent blow from a brickbat on the left side of the head during a fight. I found a lacerated stellate wound through the helix and anti-helix of the left ear, also a wound over the mastoid process. The wounds were thoroughly washed with castile soap and hot water. Then with 1-2,000 corrosive sub-

⁸ Burmann, Provincial Medical Journal, April 1, 1889, February 1, 1887.

⁹ Murrell, Medical Press and Circular, November, 1889.

¹⁰ Dembitz, American Practitioner and News, December 22, 1888.

¹¹ Lautier, Gaz. Med. de l'Algerie, June 15, 1889.

¹² Flasher, Ertzlicher Prakt., les Nouveaux Remedies, June 8, 1889; Lyon Medical, October 20, 1889.

* Read before the McDowell Medical Association, Owensboro, Ky., June 19, 1890.

limate solution. The edges were brought together with carbolized catgut sutures, dusted with iodoform, and dressed with glycerinated iodoform gauze, corrosive sublimate gauze, rubber paper, and cotton bandage. Dressing removed on third day, no pus, perfect union. The boy was dismissed with a thin layer of gauze, iodoformized, left over site of wound. Cicatrix very faint one week after dismissal.

Mr. Martin M., a patient of Dr. Woolfolk's, was brought to me for operation. I found him with a tuberculous eye. Assisted by Drs. Woolfolk, Griffith, and Miller, I removed the diseased ball. The cavity was well washed out with a 1-5,000 solution corrosive sublimate; no stitches were taken in the conjunctiva. It was well packed with ten per cent iodoformized gauze, and a dressing of glycerinated iodoformized gauze, sublimated gauze, rubber paper, with cotton bandage was applied. Dr. W. informs me that the patient was at work six days later. No suppuration.

Mr. Robert H. presented himself for operation May 29th. When he was four years old he had a fall and sustained an injury to his penis. On examination I found phimosis with prepuce adherent to the glans. Assisted by Drs. Wood, Woolfolk, Griffith, Miller, and Hoerrin, I removed the skin and mucous membrane as far back as corona. The mucous membrane wherever adherent was dissected off by curved scissors and dressing forceps. The mucous membrane and skin were stitched together when possible with iron-dyed silk. The wounded parts were washed with 1-5,000 solution corrosive sublimate, dusted with iodoform, and dressed with glycerinated iodoform gauze and cotton bandage. At one point only did pus form, and that was an abscess around one of the deep sutures. The case has gone on to recovery with hardly a staining of the dressings.

Mrs. C. H., fatty tumor in axilla. This operation was done under cocaine. The wound was treated as in previous cases. Union by first intention. No pus.

A child of Mr. W. H. Alexander, four years old. Assisted by Dr. A. C. Wood, I removed a large gravel from this child's urethra. There was phimosis. I slit the prepuce up the dorsum with the intention of performing circumcision.

After endeavoring to extract the stone through dilatation I was forced to cut the glans on each side of frenum, making a triangular flap, apex pointing upward. Through this enlarged meatus the stone was with some difficulty removed. Dressed antiseptically. I understand from Dr. Wood that there has been no suppuration, the wounds healing nicely. The next two cases were septic when first seen.

Mr. L. K. received a severe injury to right knee-joint. When I saw him he had an open, unhealthy suppurating wound two inches long by an inch broad over the patella. The wound was brushed out with a fifty-per-cent solution nitrate silver, and then thoroughly washed with 1-300 solution corrosive sublimate, then rinsed with three per cent carbolized water. It was then dusted with iodoform, and a simple carbolized dressing, rubber paper, and cotton bandage applied. This was removed in two days. The wound was clean and healthy, and granulating. The usual antiseptic dressings were then applied and the patient dismissed. Dressings were removed on sixth day. The wound had closed with the exception of a very small area. This skinned over nicely in a day or so.

J. F. came to me with a large chancreoidal bubo in the left groin, and chancroids on the body and head of the penis. The bubo in the groin was scraped with Volkman's spoon, then brushed with a saturated solution of nitrate of silver; then thoroughly washed out with 1-300 solution corrosive sublimate, and afterward rinsed with three per cent carbolized water. The cavity was then dusted with iodoform and packed with dry iodoformized gauze; bichloride gauze and cotton bandage finished the dressing. This was removed on the third day. Wound healthy. The usual antiseptic dressing was then applied and the patient dismissed. He is doing nicely. This is a clinical plea for antiseptics and the moist dressing.

OWENSBORO, KY.

PLENCKII'S SOLUTION for cauterizing condylomata: Hydrarg. chlor. corros., aluminis, cerussæ, camphoræ, alcohol, aceti vini, equal parts.

BROMOLE: TRIBROMO-PHENOL.**ITS USES IN MEDICINE AND SURGERY.**

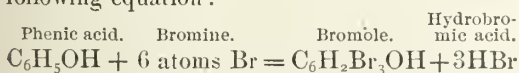
BY C. J. RADEMAKER, M. D.

This substitution compound has never before (to my knowledge) been manufactured or used medicinally. Bromine was used during the late civil war of the United States very successfully in the treatment of hospital gangrene, and was introduced into general practice by the late Dr. Middleton Goldsmith. But the practice was found very severe, the patient being unable to stand it without being etherized. It has also been used as an injection in cancer, but owing to its painfulness has been discarded. In the compound "bromole" these objections are not present, as the irritant action of bromine is destroyed; but its usefulness in these diseases has not been impaired. The action of carbolic acid, as is well known, prevents the production and multiplication of bacteria, and by this means suppuration, putrefaction, fermentation, and all disagreeable odors. Its influence in promoting cicatrization of wounds is readily understood. It operates by stimulating the parts to which it is applied, contracting and hardening them while it protects them from the atmosphere. The disagreeable odor of carbolic acid has also been entirely destroyed, lessening its antiseptic properties.

Bromole is a lemon-colored powder, has a sweet styptic taste and no disagreeable odor. It is insoluble in water, but freely soluble in alcohol, ether, chloroform, glycerine, and fixed and volatile oils. It has a feeble acid reaction to litmus paper. It melts at 122° Fahrenheit, and with increased heat is completely volatilized. Its specific gravity is 1.882. 100 parts of this compound contain:

72.5 parts of bromine,
27.5 parts of phenol (C. P.).

Its chemical constitution is explained by the following equation:



Bromole possesses but feeble if any poisonous properties; 0.7 gram to 0.8 gram, equal to eleven and twelve grains troy, were given to

dogs weighing from thirty-five to forty pounds without any bad effects whatever. This compound contains the two most effective antizymotics known to medicine, in which the disagreeable odor of one and the irritant properties of the other are entirely destroyed without interfering with their usefulness as therapeutic agents. If fresh meat is sprinkled with a little bromole, it may be exposed to a temperature of 90° Fahrenheit for several days before putrefaction will set in.

As a surgical dressing after amputations bromole will be found superior to any antiseptic known to the profession. My experience with it is confined to the amputations of fingers and toes, but the results obtained by me were so flattering that I am satisfied it will meet all expectations in the larger operations. The form in which I use it is as follows:

Bromole..... 5 ii;
Ol. olivæ..... $\frac{3}{4}$ viii. M.

Cotton-seed oil, or any other kind of fixed oil, may be substituted for the olive oil.

As a dressing for wounds, or foul and indolent ulcers, I generally use an ointment, as follows:

Bromole. $\frac{3}{4}$ i;
Ung't simplex..... $\frac{3}{4}$ i. M.

Or it may be sprinkled on the ulcer in the form of powder, with equally good results.

As a local application in diphtheria this compound produces excellent results when the glycerine solution is applied to the fauces. It immediately stops the foul odor in malignant forms of diphtheria, and destroys the exudation formed on the hardened glands. If the medicine is applied frequently, the indurated glands soften rapidly and all further exudation of membrane is stopped. The same can be said of its local application in scarlet fever. I prefer this compound to nitrate of silver or any other medicine that I have used.

The formula I use is as follows:

Bromole..... grs. xx;
Glycerine..... $\frac{3}{4}$ i. M.

Sig: Apply with a probang.

I have also used this compound successfully in croupous and tuberculous laryngitis by means of inhalation, for which I use an ordi-

nary croup kettle; also in capillary bronchitis following measles. I generally put about ten grains of bromole in the kettle.

Internally I have used it in cholera infantum, typhoid fever, and abscess of the lung, the result of which I shall report in a future article. The dose given for internal administration was one sixteenth to one fourth of a grain.

LOUISVILLE.

Societies.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

Stated Meeting, September 9, 1890, Dr. W. W. Parker, President, in the chair.

DISCUSSION OF SELECTED SUBJECT.

On the subject for discussion, "Simple Ulcer of the Rectum," Dr. Lewis C. Basher, the appointed leader, read a paper of which the following is the substance:

"I have selected this subject not with the intention of writing a lengthy paper, but simply to report a very interesting and troublesome case of this disease that fell into my hands last year. In October last I was called to see a young married lady who was suffering intensely from a persistent diarrhea and nervous prostration. She had become very much emaciated, and was very anemic. I learned that she had been a sufferer for eight or ten months from diarrhea, and during that time had lost some forty or fifty pounds in weight. She told me that she had received treatment from a number of physicians, one of whom informed her that she had a chronic diarrhea and was beyond the control of medicine, and another that she had consumption of the bowels, and intimated that death was only a question of time.

"When I saw her she had just returned from one of our alum springs, where she had been constantly under the care of a physician. To complicate matters, a pelvic abscess had formed during her stay at the springs, and had broken before she reached home.

"Under this double drain on her system she wasted to almost a skeleton and became completely bed-ridden. The abscess discharged quite freely *per vaginam*, but finally under ac-

ive treatment ceased with an improvement in her general health. The diarrhea, however, continued off and on, notwithstanding the free use of remedies. The patient now began to complain of a slight protrusion and of a smarting, with an unsatisfied feeling whenever she went to stool. She also complained of a dull aching pain at the end of the backbone. After the development of the above symptom I made an examination of the rectum with the rectal speculum. When the sphincter was slightly dilated there was a slight discharge of pus and mucus from the bowel. On withdrawing the blades of the speculum somewhat I discovered an ulcer about an inch and a half in diameter, occupying the anterior wall of the rectum just above the internal sphincter. The speculum was then removed, and by inserting the finger into the vagina the bowel was turned outward, bringing the ulcer fully into view. After cocainizing the ulcer, and slightly scraping it, I made an application of nitrate of silver.

"When I saw the patient on the following day I was informed that the dull pain in the lower end of the backbone was very much improved, and that there had been only one movement from the bowels in twenty-four hours, and this one was unaccompanied with the usual rectal tenesmus. Previous to the discovery of the ulcer and the application of silver, there had been from three to six movements in twenty-four hours. This treatment was repeated at intervals of five or six days for some little time before the ulcer healed.

"The diarrhea has now been absent for some six or eight months, and although she is very emaciated and anemic she is doing very nicely and is enjoying a stay in the mountains.

"I have reported this case for two reasons; firstly, to emphasize the importance of diarrhea as a persistent system in some forms of rectal ulcer. Secondly, to call attention to the long train of nervous symptoms which followed its presence and which with the diarrhea were entirely relieved by removal of the cause. Further confinement to bed this patient was the subject of constant attacks of hysteria. She is now comparatively free from all hysterical symptoms.

"Dr. Allingham, in his work on the rectum,

says: 'Ulceration of the rectum is not an uncommon disease. It inflicts great misery upon the patient, and if neglected leads to conditions quite incurable. As the earlier manifestations are fairly amenable to treatment, it is of the utmost importance that the disease should be recognized early. Unfortunately, it rarely is so; the symptoms are obscure and insidious, the sufferings at first but slight, and thus the patient not only deceives himself but his medical attendant.'

"Now, what are the symptoms of this affliction, and what are the causes producing it? Diarrhea is an early symptom, occurring early in the morning, frequently as soon as the patient gets out of bed. There is a most urgent desire, with an unsatisfied feeling, requiring the patient to remain long at stool. A dull aching pain located at the end of the backbone is another symptom.

"Blood, sometimes mixed with pus and mucus, often escapes from the rectum. When the ulcer is complicated with a fissure in the anus, the most intense suffering, often lasting for hours, will occur, especially after stool. Pruritus ani, caused by the ichorous discharge from the ulcer, is another very annoying symptom.

"So blood poisoning of the different organs of the body may occur when the ulcer has begun to break down, and, in its destruction of tissue, pus, mucus, and impure blood are excreted.

"Prominent among the causes of rectal ulceration is catarrh of the rectum or proctitis, which may be brought on by exposure to cold, sitting on cold surfaces, etc. So the lodgment in the bowel of fish or chicken bones, fruit stones, buttons, seeds, pins, etc., which have been accidentally swallowed, may set up severe forms of ulceration.

"Operations for hemorrhoids and accidents in childbirth, too, may be numbered as among the causes. Constipation, the fecal masses tearing the delicate mucous membrane of the rectum, is not an infrequent cause of ulceration. In the first edition of Kelsey on Diseases of the Rectum and Anus he says: 'It is much easier to give a lady a diarrhea mixture and trust to Providence for a cure than to gain her

consent to take ether and be thoroughly examined, and for this reason many a case of curable disease has been allowed to reach an incurable stage before its existence has been certainly determined. The existence of a chronic diarrhea or of a discharge of any kind from the rectum is always a good and sufficient reason for a thorough physical examination, and with ether, a dilated sphincter, and a good speculum, no one need be in doubt as to the existence of ulceration in the lower part of the rectum.'

"Would it not then be well in chronic forms of diarrhea, failing to be relieved by the usual recognized treatment, to make an examination of the rectum with a speculum and exclude ulceration before pronouncing our patients the subjects of incurable forms of diarrheas."

Dr. W. W. Parker mentioned a woman who recovered from a rectal ulcer three inches long.

Dr. J. S. Wellford thought Dr. Basher had made a good suggestion. He was sure that many cases of chronic diarrhea and so-called chronic dysentery with great prostration were due to rectal ulceration, and could be cured by the line of treatment suggested. As illustrative he reported two cases of abscess about the rectum and one case of rectal ulcer.

One of the former was particularly interesting because the patient lost five or six ounces of tissue, the anus was completely denuded, and the end of the rectum detached and hanging out—yet he recovered.

In one of these cases the doctor was struck with the fact that the bismuth which had been given for the diarrhea continued to pass ten days or two weeks after its administration was stopped. He therefore had no confidence in bismuth except as a protective in irritation, since it merely adhered to the bowel and was not absorbed.

Dr. W. also stated that it was not necessary to dilate in females, particularly if the parts were relaxed from age or often-repeated parturition—the finger in the vagina could readily turn out the rectum. Dilatation was best in the male to paralyze the sphincter.

Dr. Landon B. Edwards was desirous that other remedies should be suggested for simple ulcers of the rectum in case the caustic treat-

ment failed, as it sometimes did. He suggested bismuth and iodol (or iodoform) in equal parts. He had relieved a man by that treatment in about two months, when he had run the gauntlet of twenty-six doctors before reaching Dr. E. The doctor stated that simple ulcer of the rectum was not common.

Dr. Parker had seen Dr. Hunter McGuire cure a case absolutely by diet.

Dr. T. J. Moore had gained a valuable hint from the last named case in the treatment of two cases of his own. The first was a man who, being told he had cancer of the rectum, became positive that his bowel was so constricted that he could not get up a simple enema, and that he only passed at stool a few drops of mucus through the muscular action of the bowel. He really had fourteen to twenty actions a day, and while fecal matter was there, yet the consistency was for the most part blood and mucus.

Dr. M. convinced him of the absence of the constriction by injecting a quart of water, though the man imagined it was running back into the basin. An examination showed the whole of the lower part of the rectum excoriated. By a diet of stale bread and milk, and bismuth and salicin (internally) as medicines, he was cured. The doctor mentioned another case—a constriction complicated by an ulcer just above it. Dilatation and diet effected a cure.

The doctor recommended (in males) salicin and bismuth internally and non-local interference as a rule. Where the trouble involved the internal sphincter, dilatation by the thumbs was indicated. Here nitrate silver seemed almost specific in healing and relieving pain. Iodoform very frequently relieved pain and spasm for a few hours. He mentioned a case in which for that purpose he used it with marked success in suppositories.

REPORT OF CASES.

Continued Fever. Dr. Parker stated that the young man whose case he reported at last meeting as resembling typhoid was still sick. He had complained of severe headache all along, and he had a dull look about the eye. The doctor was afraid of head trouble. The tem-

perature had kept up from 101° to 103°. Dr. John R. Wheat, in whose charge Dr. P. left the patient, for a while gave full doses of quinine every morning, but without relieving the fever.

His pulse, continued Dr. P., was weak, but the skin was always moist and cool; tongue clean and moist also—a good appetite. At his request he was allowed some soft eggs on Tuesday last, but they acted on his bowels and had to be stopped. There had been for some days a too free discharge of high colored urine—one quart in six or eight hours. It was acid, but contained no albumen or bile. There had been no tympanites from first to last, nor any approach to it. The prostration and emaciation were marked. He took plenty of liquid food—large quantities of milk among other things—to keep up his strength. Was this typhoid? He (Dr. P.) thought it was.

Dr. Edwards had searched the literature to get light upon the above class of fevers. In Vol. I, Pepper's System of Medicine, he had found it described as simple continued fever by Hutchinson. There was not the dry tongue, the eruption, the decided tympanites, nor the other characteristic symptoms of typhoid fever. Any solid food whatever would raise the temperature. Purging could be done without damage.

He had a case now which had run sixty days. First the patient had typho-malarial fever, recovering in about fifteen days. Later on this continued fever began. He was now convalescing, but had a considerable urethritis, for which no cause could be assigned.

Dr. Wellford thought the amount of fever would account for the highly colored and acid urine as well as its high specific gravity (referring to Dr. Parker's report), and the amount of milk and other liquids taken would account for the quantity of urine. The doctor (Wellford) called this continued fever *typhoidal* because, while it lacked most of the characteristic symptoms of typhoid, yet it resembled the latter in the prostration present and the continuous fever. He believed it was typhoid. It reminded him of typhoid in children, where, owing to the non-development of Peyer's patches, etc., most of the characteristic symptoms were lacking. In

this connection he stated that Dr. Coleman, of this city, had said that any fever in children running over twenty-five or thirty days, and not controlled by quinine, was typhoid.

Dr. Moore thought the nature of this fever would the sooner and better be learned if every doctor would arrange to obtain the temperature of such patients twice a day—say, between 7 and 9 A. M. and between 4 and 6 P. M. The more general knowledge of the thermometric in this fever thus gained would materially assist in the diagnosis of it.

Dr. Parker suggested that as the greatest prostration always occurred between 2 and 4 A. M. the temperature should be taken then as well as at the hours suggested by Dr. Moore.

J. W. HENSON, M. D.,
Reporter.

Reviews and Bibliography.

Rheumatism and Gout. By F. LE ROY SATTERLEE, M. D., Professor of Chemistry, Materia Medica, and Therapeutics, in the New York College of Dentistry, etc. 83 pp. (Physician's Leisure Library Series.) Detroit, Mich.: Geo. S. Davis. 1890.

There are few subjects upon which the medical mind is more prolific than upon those of rheumatism and gout.

The author thinks they have been the subject-matter of text-books and medical treatises *ad nauseam*, and, of course, ventures to add another only because he believes he has discovered new points in pathology and treatment. The central feature of his pathology is the retention of uric acid in the system with failure of oxidation to the point of urea. To promote the further oxidation of uric acid and its more complete elimination are the aims of the suggested treatment.

The long list of medicaments recommended by the writer might seem quite superfluous from the point of view of a few years past, when it was almost universally held that we had in the salicylates a remedy for rheumatism as potent as quinine in malaria. But stranger still does it seem when we read in the "very latest" a sentence such as this: "The writer does not approve of or recommend the employment of

salicylic acid or the salicylates in the treatment of cases of acute rheumatism." He will only allow that they relieve pain while they work harm in nearly every other regard. This, a short time ago, would have been considered rank heresy; but now the heretics are getting to be so numerous that it is not good politics to call it so. And if it is indeed not heresy, what a reflection on a profession whose hourly task is applying to facts the power of reason and the test of experiment.

If, indeed, the saving virtues of the salicylates in rheumatism are to be relegated to the domain of myths, then indeed may we join the Scottish poet in his prayer—

"O wad some power the giftie gie us,"

to see oursels as we shall this time next year.

Verily, we owe it to the credit of our profession to be slower to proclaim panaceas than we have been in the past.

D. T. S.

The Urine, the Common Poisons, and the Milk; Memoranda, Chemical, and Microscopical, for Laboratory Use. By J. W. HOLLAND, M. D., Professor of Medical Chemistry and Toxicology, Jefferson Medical College of Philadelphia. Illustrated. Third edition, revised and much enlarged. 84 pp. Price, \$1.00. Philadelphia: P. Blakiston, Son & Co. 1889.

This book is intended to be used as a syllabus for the laboratory. The text is made brief and to the point, which makes the volume handy for reference. Its value has already been abundantly established by actual use, being alike adapted to the minds of those whose course of study is brief, and to those who would gain the most thorough knowledge of the subject feasible for physicians. This is effected by printing the more important matter in large type, while provision is made for more thorough study by extended explanations and quantitative processes given in the smaller print.

How to Preserve Health. By LOUIS BARKAN, M. D. 344 pp. Trade supplied by the American News Company, New York.

"How to Preserve Health" will at first strike the physician as commonplace to the extreme, until he reflects that the book is not for the

medical profession, but for the public, when its fitness becomes fully apparent. The style is simple, plain, and easy, the print bold, and just enough is said upon each theme to permit it to be read with relish for something more. It is bound to accomplish much good. D. T. S.

How to Examine for Life Insurance. By JOHN M. KEATING, M. D., President of the Association of Life Insurance Medical Directors, etc. 211 pp. Philadelphia: P. Blakiston, Son & Co. 1890.

This is quite a full treatise on all the points necessary to be understood to render one a capable examiner in life insurance. Indeed, it is a question whether a great part of it, devoted to physical diagnosis, is not superfluous, since such matters may be better studied when given in a connected manner in the text-books devoted to them. The reader, however, is not particularly harmed by having a variety to choose from.

A work of this kind is indispensable to the examiner in life insurance, and this is perhaps not surpassed by any other on the same subject. D. T. S.

Abstracts and Selections.

ON CHLOROFORM NARCOSIS. — T. Lauder Brunton, M. D., Sc. D., F. R. S., in introducing this subject before the International Medical Congress discussed the question, Does danger to life during chloroform narcosis arise from failure of the heart or failure of the respiration, and how is such a danger to be averted? After tracing the nature of the early investigations for the discovery of the toxic effect of chloroform, he said: "Other experiments have shown that chloroform is undoubtedly a protoplasmic poison of very considerable power; it will destroy microbes and prevent putrefaction; when mixed with blood it will destroy the corpuscles, and when injected into the artery of a limb it will produce *rigor mortis* in the muscles to which it is distributed and render the limb as stiff as a piece of board. The results of these experiments have been used to explain the sudden deaths occurring during chloroform narcotization, and it appears to me that this has been done without sufficient regard to the conditions under which the chloroform has been applied

in the laboratory in the experiments to which I have referred, and those under which it is employed in surgical, medical, and obstetrical practice as an anesthetic, for the conditions under which a drug is applied may so completely alter its action that a dangerous poison may be, when applied in a certain way, perfectly harmless." He illustrated this by referring to the well-known arrow-poison, curara. "The effect of curara in paralyzing motor nerves when it reaches them in sufficient quantity is so thoroughly demonstrated that no physiologist would dream of doubting the fact. But one can readily conceive that a student who has seen the marked paralyzing action of curara might be inclined to doubt the statement that it was innocuous when given by the mouth, and in like manner any one who has seen the extraordinary effects of chloroform injected into the arteries in producing *rigor mortis* of the muscles might be inclined to say this drug must needs be dangerous; and if he had found—as find he certainly would—that it lowered the blood-pressure, and stopped the heart when the vapor was blown directly into the lungs, he would be very likely to think that it could not be innocuous when simply inhaled. But this is the very question which is of vital importance for us. I grant at once that chloroform is a protoplasmic poison. I have rendered the muscles of an animal as stiff as a piece of wood by injecting it into the artery of a limb; I have stopped the pulsations of an animal's heart by blowing chloroform vapor directly into the lungs. But what I wish to maintain is, that notwithstanding all this, when chloroform vapor is inhaled in the usual way by inspiratory efforts of the patient himself, it does not stop the heart, but acts first upon the respiratory center, and by stopping the breathing prevents a quantity of chloroform sufficient to stop the heart from reaching that organ." This is no new doctrine; it was held by Sir James Simpson, it was taught by the late Professor Syme and by Sir Joseph Lister, and it was the respect which one of Professor Syme's pupils, Surgeon-Major Lawrie, had for his master's teaching which led to the performance of the experiments of which he proceeded to give a short summary. In speaking of the attention necessary to be given to the respiration, Dr. Brunton said: "We may say, then, that the time of grace is only half a minute, and if the administrator's attention should be so distracted as to allow this half minute to elapse after the respiration has ceased the patient will probably die. It is evident, then, that constant attention to the respiration is required, and indeed this was the great lesson taught us by our experiments: When chloroform was inhaled

with free admixture of air it usually produced a fall of blood-pressure to some extent, but the administration of chloroform may be continued for a long time without much further fall, provided always that plenty of air be given along with it. But if chloroform vapor be given with a deficient quantity of air the fall of blood-pressure is very rapid, the cardiac pulsations become slow and irregular, and shortly cease altogether. This irregularity is well shown in the tracing of the Glasgow Committee, from which they drew their conclusion that chloroform depresses the heart, and does so irregularly and in an unforeseen manner. The tracing is evidently one of slow pulse due to irritation of the vagus. We made many attempts to imitate it. We were able to do it to some extent by direct irritation of the vagus by electricity; but as no direct irritation of the vagus had been applied by the Glasgow Committee we tried all the things that seemed to us likely to produce accidental vagus irritation. We applied to the trunk of the nerve strong solutions of bicarbonate and carbonate of soda, thinking that possibly some of the solution used to prevent coagulation might have come upon a nerve. We ligatured it along with the artery and also by itself, but did not succeed in reproducing the tracing. We tried to irritate the nerve reflexly by stimulation applied to the sciatic nerve, to the ulnar nerve, and to the central end of the vagus. These attempts were also unsuccessful; but on simply closing the animal's mouth and nostrils, or closing the opening of the tracheal cannula when one had been introduced, we were able at once to reproduce the tracing with certainty. It will be noticed that respiratory movements not only exist, but are exaggerated in the Glasgow tracing; but it is quite clear, from their very exaggeration, that air was not entering the animal's thorax at all, or, if so, it must have been a small quantity. The respiratory passages were evidently blocked in some way, otherwise such respiratory curves would not have been evident in a blood-pressure tracing. We were able to produce such curves both when the animal was thoroughly under chloroform and when it was completely out of chloroform. In order to ascertain the effect of shock in depressing the circulation we made a number of experiments, repeating upon the animals those operations which had been peculiarly fatal to life during chloroform narcosis. It is remarkable that the largest proportion of deaths during chloroform have occurred not in serious operations, but in trivial ones, such as extraction of teeth, slight operations upon the anus, evulsion of toe-nails, and such like. We were a good deal astonished to find that these experiments in animals produced hardly any effect

upon the circulation. Put shortly, the effect of shock, such as we observed it, was very slight. Just before the commission was appointed an unfortunate case of death from nitrous oxide occurred in Edinburgh. A lady, while inhaling the gas in order to have a tooth extracted, suddenly fainted and died. In trying to restore her it was found that her stays were very tightly laced, and they had to be cut open to allow artificial respiration to be fairly tried. We therefore thought it advisable to test the effects of pressure upon the chest, and, as there is a difference in the mode of respiration between man and woman, we selected female monkeys, and applied round the chest a bandage of some plaster of Paris so as to imitate stays, while a narrow band was tied round the abdomen so as to imitate the band of petticoats. Under such circumstances we found that death occurred very rapidly from the administration of chloroform. Curiously enough, a number of lay journals drew attention to these experiments and denounced them a horrid cruelty, totally forgetting that not the least pain was inflicted, as the animal was under chloroform from beginning to end, and, moreover, the object of these experiments was, like those of the whole commission, in the words his Highness the Nizam himself, 'to save people's lives.' At the conclusion of his paper the author said: "Our experiments have led us to believe that the doctrine taught by Simpson and by Syme is the correct one—namely, that in chloroform narcosis by inhalation the respiration fails before the heart, and that close attention to the respiration is the true way of avoiding danger. In regard to ether and chloroform our experiments led us to agree entirely with Claude Bernard. He says: 'As to ether and chloroform, their action is almost the same from a physiological point of view, excepting that there is a difference of intensity in favor of chloroform, which will lead us generally to employ this latter substance in preference to ether.' Our experiments, numerous as they were, are quite insignificant in comparison with the enormous number of times that chloroform has been tested upon human beings, but they are much more numerous than any series hitherto made upon animals, and they have a special value from the fact that the whole results of the blood-pressure experiments have been recorded automatically and the tracings photographed. By the great generosity of his Highness the Nizam a copy of the photographs will be sent to the most important medical libraries in various parts of the world, and the results of the experiments will consequently be as readily available for those who simply consult the photographs as they were for us who ac-

tually did the experiments. We believe that the fear of chloroform as an anesthetic has arisen not from clinical observations, but from the results of experiments upon animals having been wrongly interpreted, and the erroneous interpretation applied to explain the cause of death during the administration of chloroform in man. The question can not be finally settled either from the purely clinical or the purely experimental side; both must be worked up together, and to this end the *Lancet* has sent out a circular asking for information regarding all cases of death from chloroform. When all the deaths from chloroform have been completely tabulated their causes may be interpreted by the light of our experiments; and we believe that the result will be to show that they have been due to failure of the respiration, and not to the direct action of chloroform upon the heart. Failure of the respiration may have occurred from the effect of chloroform, and have been unnoticed, either from the attention of the administrator being distracted, or while changing the position of the patient so that the respiration could not be easily noticed; or while respiratory movements have continued, asphyxia may have actually occurred from stoppage of the air-passages, from the tongue falling back, or from the actual entrance of foreign bodies into the air-tubes. Pressure upon the chest or abdomen by the arms of the operator or of his assistant is another cause of imperfect respiration not to be neglected, and a most important one is that of tight clothing. If the administrator is unable to feel the pulse without diverting his attention from the respiration, he had better leave it alone. Hitherto it has been the practice to examine the heart before administering chloroform, but it is possible that a safer guide might be found in the condition of the urine. At present, however, we do not know precisely in what direction to look for indications of danger in the urine; though, if it contains an abnormal quantity of alkaloidal substances, it is possible that risk may ensue. The whole subject of danger arising from poisons formed in the body has received a new impetus from the researches of Brieger, and it is to the application of his methods that we must look for aid in solving the question I have just raised. But whatever sources of danger hitherto unlooked for may possibly tend to produce death during chloroform narcosis, and whatever opinions may be held in regard to the comparative merits of the different anesthetics, there can, I think, be but one opinion regarding the action of the Mohammedan ruler, who has shown toward science in modern times the same liberality that Haroun al Raschid and other caliphs showed in

times of old. To him and his enlightened ministers, Sir Asnan Jah and Iutesar Jung, not only science, but humanity in general, owes a debt of gratitude."—*London Lancet*.

THE DIFFERENTIAL DIAGNOSIS BETWEEN SIMPLE AND TUBERCULAR BRONCHO-PNEUMONIA IN CHILDREN.—M. Huntinel attaches weight to the following considerations:

In tubercular broncho-pneumonia, onset is more insidious. Dyspnea is excessive; that is to say, it is greater than the auscultatory and other physical signs of consolidation would lead us to expect. There are perhaps a few scattered râles to be heard with a small patch of deficient resonance; and yet, with these slight signs, there may be fifty—sixty respirations to the minute, and marked cyanosis; speaking generally, the auscultatory signs are more prominent in simple inflammatory broncho-pneumonia.

As to the localization of the mischief, the apices are far less frequently affected in children than in adults. In children under the age of six to seven, it is rare to find tubercular consolidation limited to the apices. On the other hand, a simple broncho-pneumonia may affect the apex, and a tubercular the base only, of the lung. The temperature gives no certain indications; but in the tubercular variety temperature and pulse often do not correspond. The pulse may be 140—150 beats to the minute, and the temperature 100°; or the temperature may be high and the pulse slow.

Convulsions have little significance, unless there be in addition other symptoms of meningitis present. Evidence of presence of tubercle in other organs must be carefully sought for. Often the diagnosis can only be certainly made by watching the general course of the malady; in the tubercular cases, of course, normal resolution does not show itself: from time to time the auscultatory signs may indeed improve, but only to be succeeded by fresh mischief, while the general condition of the little patient deteriorates.—*Gazette des Hôpitaux*.

THE INFLUENCE OF DRUGS ON ABSORPTION. The importance of a knowledge of the process of absorption taking place in the intestine can not be overrated, and consequently any addition to our information on this subject is to be welcomed. The absorption of drugs by the intestine has been very little investigated, and it is on this point that Leubuscher, of Jena, has made some experiments. The process of absorption must no longer be considered a purely physical one, but a function of living cells, so that any causes which may injuriously affect

the life of these cells will also interfere with proper absorption. The cells may be altered by influences acting directly on themselves, or through the blood current, or through means of the nervous system. With regard to direct injury of the cells, Leubuscher experimented by isolating a small coil of intestine in a living animal by means of light ligatures, and then injecting a strong solution of a mineral acid, washing this out with water and introducing a known quantity of grape-sugar in solution. Compared with a normal intestine, the quantity of grape-sugar absorbed was considerably lessened. In other experiments, the artery supplying the coil was tied, or the vein leaving it, producing in the one instance anemia and in the other congestion; in both cases, but more especially in the latter, absorption was greatly interfered with. Investigations as regards the third division—namely, the effect of the nervous system—could not be fully carried out. The action of various drugs was then tried. Grape-sugar and a solution of iodine in iodide of potassium were used as tests of the power of absorption, and the following drugs were selected: quinine, opium, alcohol, glycerine; also weak solutions of common salt and Carlsbad waters. Coils of intestine were exposed and isolated in two animals. In one the grape-sugar or iodine solution alone was injected, and in the other the same mixed with the drug to be tested. The results were afterward corroborated in animals in whom an artificial intestinal fistula had been secured. Quinine, opium, and morphia, even in weak solutions, interfered greatly with absorption. Morphia acted in the same manner when it was introduced into the system by means of hypodermic injections. Alcohol in weak solution (5 to 2 per cent) increased absorption, but in larger quantities hindered the process. Glycerine produced no decided effect, weak solutions of common salt increased, and Carlsbad water had no effect on absorption. A few experiments were also tried by estimating the quantity of iodide of potassium passed within a certain time in the urine of patients after a dose of this drug had been administered by the mouth, the iodide being dissolved either in water, alcohol, glycerine, Carlsbad water, or milk. With alcoholic solutions the quantity was increased as compared with the watery solutions; with glycerine, this was the same as with water; Carlsbad water also increased it, but milk lessened the quantity.—*Lancet*.

BALLOONING OF THE RECTUM.—In the *Lancet*, Burghard summarizes fifteen cases of this condition, first described by Bryant in January, 1889. This consists of an extreme dilatation

of the rectal walls, so that the examining finger enters a large cavity, the walls of which have to be sought. Bryant stated that this condition exists only in connection with stricture of the rectum in its upper part, or of the sigmoid flexure. Of Burghard's cases, five were associated with stricture (two as yet not confirmed by autopsy), two with fecal obstruction, and five with chronic constipation; two with spinal fracture, and one with extreme angular curvature from dorso-lumbar caries.

The cases of constipation were in old people, the youngest being forty-five. Matthew Duncan describes a semi-paralyzed "pouched" rectum in a woman, leading to retention of feces. In these cases there was no pouching, though the folds of Houston stood out like shelves, and sometimes upon them rested fecal matter. The greatest dilatation was backward, so that the rectal wall seemed to be fitted into the sacral hollow.

The factor necessary to produce this ballooning is probably a paresis of the muscular portion of the rectum, with loss of contractility, distension by feces, flatus or enemas. Some cases showed that the rectal walls were thinner than normal. There is some analogy with senile atony of the bladder.—*The Times and Register*.

ON THE TREATMENT OF CYSTITIS IN WOMEN.*—(Thomas More Madden, M. D., F. R. C. S. Ed., Physician to the Hospital for Sick Children, Dublin; Obstetric Physician and Gynecologist Mater Misericordiae Hospital.) Of all the diseases which come before us in gynecological practice there is none more frequently met with, more distressing in its effects, or more intractable to the means generally relied on for its relief than cystitis in women. I therefore desire to bring under the notice of the International Medical Congress a method of treatment which I have found, by clinical experience, to be generally successful in the rapid curative treatment of this condition. The measures most commonly employed in such cases are merely palliative, and may relieve but *per se* can never cure well-established cystitis in women. Nor am I aware of any method by which that can be accomplished save by giving the bladder absolute physiological rest. For this purpose Dr. Emmet's operation, the establishment of an artificial vesicovaginal fistula, may be successfully employed in some instances, but the practical objections to it are so great and obvious that for several years past I have abandoned this procedure in favor of another which I have found more

*Abstract of a paper read before the International Medical Congress, Berlin, August, 1890.

generally effectual, and quite free from the disadvantages of the operation referred to. The plan, which I have now employed in a very large number of cases of cystitis in the gynecological wards of the Mater Misericordiae Hospital, Dublin, consists firstly in the full dilatation of the urethral canal with the instrument exhibited, so as to paralyze the contractility of the sphincter vesicae and canal, and thus produce a temporary incontinence of urine; and secondly, in the direct application through the same instrument of glycerine of carbolic acid to the diseased endo-vesical mucous membrane. I may add that any pain thus caused may be prevented by the previous topical application of a solution of cocaine, and that the procedure recommended seldom requires to be repeated more than once or twice at intervals of a week or ten days, and, combined with the internal use of boric acid, rarely fails to effect a rapid cure in any ordinary case of female cystitis.

TREATMENT OF OBSTRUCTIVE DYSMENORRHEA.*—(Thomas More Madden, M. D., F. R. C. S. Ed., Physician to the Hospital for Sick Children, Dublin; Obstetric Physician and Gynecologist Mater Misericordiae Hospital.) In the recognition of obstruction from cervical stenosis as the chief cause of dysmenorrhea, will be found the key to the pathology and successful treatment of this condition in the great majority of cases. Thus, in my hospital practice during the past twenty years, nearly eleven per cent of sterility similarly caused have come under observation in a total of nine thousand gynecological cases. Of all the ailments of female existence, few give rise to more persistent suffering, or produce more disastrous effects on the general health, and even on the cerebro-nervous system, or on the moral constitution of the patient, than does well-marked obstructive dysmenorrhea. The latter consequence is more especially evident in many cases of alcoholism, which in women may very frequently be dated from their first painful menstrual period, for the relief of which stimulants are too often improperly administered, and repeated in increasing doses until finally, in many cases, the victim of dysmenorrheal alcoholism becomes an habitual, and perhaps an incurable drunkard.

It is not my purpose here to refer to the successive improvements which have since been effected in the methods of carrying out the gradual dilatation of the cervical canal, since the introduction into practice by Simpson and Swan of sponge tents or laminaria bougies for

this purpose. No greater improvement has occurred in our branch of surgery than the replacement of these oftentimes unsatisfactory, possibly hazardous, or even fatal, and always painful procedures by the more effective means now at our disposal for the rapid expansion of this canal. Of these, perhaps the best known and most generally employed are either Hegar's, Duke's, or Lawson Tait's dilators. I now desire for to call attention to another instrument which I have designed for the same purpose, and which, I venture to hope, may be found to supply a want still recognized by the gynecologists—namely, that of a reliable and effective means of securing the rapid and permanent dilatation of the cervical canal in the treatment of stenosis giving rise to the morbid conditions now under consideration. This instrument differs from other dilators in several respects, and, above all, in one which I consider most important, viz., in producing expansion of the canal from within outward; in other words, in imitating the natural process of expansion from the uterine cavity downward to the os uteri; whereas, most other dilators, such as Hegar's, etc., act in the opposite direction. In my hands the utility of this instrument, the expansion effected by which may be measured by the affixed index, has been fully tested in a very large number of cases of sterility and dysmenorrhea in hospital and private practice. I may add that my dilator, which does not occupy more room than the ordinary sound when introduced, may also be used with advantage for the dilatation of the female urethra in many cases in which this procedure is indicated.

MODERN PREVALENCE OF DENTAL CARIES. The question so often asked dental practitioners by patients, "What is the reason of the great increase of decay of the teeth of the rising generation?" formed the text of Mr. Kirby's presidential address at the annual meeting of the British Dental Association (Eastern Counties Branch). He thought that there could be little doubt that the increase of decay which was met with was greater than the increase in the population would account for. The Registrar-General's reports suggested that some part at least of the increase in population is due to the increase in the average length of life among us, and this in turn to the diminution in mortality among infants and children of tender years. In other words, in consequence of improvements in sanitary and medical science a considerable number of infants survive the diseases and dangers of childhood, who would formerly have succumbed to them. Thus we have added to the population a con-

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siderable number of persons who, if not actually weak, may be looked upon as scarcely equal, physically, to those who used under harder circumstances to fight through the battles of childhood. And if in the next generation there be an increase in the number of children who are the offspring of such parents, we may expect to find a general lowering in tone and consequent greater tendency to dental decay. He also considered that another cause which had not received the attention it deserved was the influence of climate, which may be unsuitable to a special race; for instance, the children of English parents born in India often possess fairly good teeth, while the teeth of children whose parents and grandparents have resided there are usually deplorably bad. It may also be fairly said that the children of English people born at the Cape, as well as the descendants of our race in America and Australia, have inferior teeth to our own.—*Lancet*.

TWO CASES OF MALIGNANT DISEASE OF THE PHARYNGO-LARYNX AND LARYNX.—Cancerous disease of the lower pharynx and larynx is sufficiently uncommon to permit the report of two cases. These presented points of interest in their history and progress, not the least important of which was the extent of disease present when medical care was sought, and the rapidly fatal termination in each.

CASE 1. Thomas L., aged thirty-six, Englishman, dog-trainer, came under observation at the Louisville City Hospital, March 1, 1888. He was a man of good physique, only slightly emaciated, with much difficulty in breathing, and aphonic. The dyspnea was so great that Dr. Vance, in charge of the surgical wards, was asked to see the case at once with the intention of performing tracheotomy. On my examining with the laryngeal mirror, the upper portion of the larynx was found to be filled with a large, irregular, warty mass, covered with mucus and pus. The pyriform fossa was filled with the growth, the epiglottis pushed far to the left, and its right free edge involved. The chink of the glottis was overhung by the tumor. From the great effort required in breathing and the narrow space left through which air could enter, an immediate tracheotomy was demanded. This was performed by Dr. Vance under local hypodermic injections of cocaine. The relief from dyspnea following introduction of the tracheotomy-tube was immediate. In a short time quiet sleep was procured. The next day he appeared bright and was breathing easily. The following history was obtained: He had suffered with some throat trouble for about two months. The hoarseness increased rapidly, and for about two weeks there had

been progressive difficulty in breathing. There had been no great trouble in swallowing until within a few days. No enlargement of the lymphatic glands in the neck, and no pain in the ear, or hemorrhage. The relief following the tracheotomy lasted only for three days, when respiration again became labored, and, notwithstanding the introduction of a longer tube he died on the sixth day with exhaustion from labored respiration.

The larynx and trachea, with the tongue attached, were removed by one of the internes. On longitudinal section a growth was found involving the entire right half of the larynx, extending on to the epiglottis. Below the lower edge of the growth the trachea was enlarged to nearly twice its normal caliber. The tissues surrounding the tracheotomy orifice were necrotic, but the orifice was not encroached upon by the neoplasm. Dr. Simon Flexner kindly examined the growth microscopically, and reported that "it presented all the features of a typical squamous-celled epithelioma. Notwithstanding its rapid proliferation, the cellular elements were well formed and the cell-nests numerous, large, and strikingly perfect."

The local appearance of this tumor, when viewed through the laryngeal mirror, was that of an epithelioma, but the age, absence of glandular enlargement, hemorrhage, and only slight pain on swallowing led to the belief that it was a sarcomatous growth.

Epithelioma is the most frequently encountered of all growths in this locality. In Mackenzie's report of 53 cases of malignant growth involving the larynx proper, 45 were epithelioma. Of these only 6 occurred between the ages of thirty and forty. The question of extirpation was never considered in this case, since the tracheotomy did not prolong life as much as had been expected. Had the case been seen earlier in its progress and its nature recognized, tracheotomy, followed by extirpation of the right half of the larynx, might have added several years to his life. Mackenzie states that the average duration of life in epithelioma of the larynx is from eighteen months to two years. It is remarkable in this case for the growth to have existed so long and only within two months given rise to symptoms referable to the throat. The cartilaginous framework of the larynx was not involved in the growth.

CASE 2. Dr. Z., retired physician, consulted me through the request of Dr. E. R. Palmer, in May, 1889. He had formerly lived in Kentucky, but for the past fifteen years has been a resident of Florida. Several years ago he had much trouble from recurring tonsillitis, but since his residence in the warm southern cli-

mate this had disappeared. In January, 1889, he began to expectorate considerable mucus, and he noticed an enlargement of one of the lymphatic glands beneath the angle of the jaw on the right side. When a young man he contracted syphilis, but underwent prolonged treatment, and had not in forty years noticed symptoms of the disease. The throat annoyance has gradually increased, and coming to Kentucky on business, he concluded to seek advice. He appeared somewhat exhausted, as he explained, from long travel; was always a man of slight flesh; nevertheless he had been strong before starting on his journey. His voice was clear, his swallowing was not painful, but very deliberate. He had suffered at times with darting pains in the right side of the neck, extending up to the ear. Breathing was free. On examination I found nothing in the oropharynx. With the laryngeal mirror a mass was seen projecting from the right lateral wall of the pharynx above the entrance into the larynx. It was covered with pus, and was about three fourths of an inch long and one half an inch in width, and protruded so as to interfere with the epiglottis during the act of deglutition. The lymphatic glands on right side of the neck are enlarged. The larynx could be seen, and no growth extending into it was discovered; yet the right half was partially fixed and the opposite vocal cord in its excursions passed beyond the middle line to the right. There was no family history of cancer. His father died at an advanced age and his mother still lives. The brothers and sisters that died had succumbed to acute diseases, three still living and healthy. One week after my first examination he was seen in consultation by Dr. Coomes, and with his assistance I removed with the laryngeal forceps a piece of the growth that made up about one third of the projecting mass. In a few days another attempt was made, and the growth removed almost to a level with the walls of the pharynx. After these operations the glandular infiltration in the neck rapidly increased. Dr. D. W. Yandell was consulted as to the advisability of an operation from without, but he advised against external interference. The patient was also presented to the Medico-Chirurgical Society, and the question of a radical operation discussed, but the majority of opinion was averse to such proceeding. The growth soon again became prominent in the throat, and interfered with deglutition by obstructing the epiglottis. The right arytenoid prominence became boggy and infiltrated, and the right cord fixed. Another operation with forceps and galvano-cautery was resorted to, after which deglutition was easier, but the glands in the

neck rapidly enlarged after the operation, and extended from the parotid gland to the clavicle. They were very hard and growing more painful. August 1st he began to show well-marked signs of the cancerous cachexia, and soon went to the home of his family in this State, where he died August 30th from exhaustion, without signs of obstructed respiration. No autopsy. The pieces removed with the forceps at two different sittings were submitted to Dr. Simon Flexner for microscopical examination. He reported that "the portion removed at the first operation showed many embryonic elements and but few epithelial cells, with a total absence of alveolar structure. The pieces removed subsequently presented the appearance of typical encephaloid carcinoma. It seems that the first tissue examined was from the margin of the spreading growth and consisted of the so-called indifferent tissue, the precursor of carcinomatous invasion."

When this case was first seen and the history obtained, it was thought that it might be specific, and to clear up the doubt potass. iodide was given in increasing doses, but without effect. Later on, under the recommendation of Baratoux, the tincture *Thuja occidentalis* (*arbor vitæ*) internally and locally was tried, but without effect on the rapidity of the extension or the excessive secretion, which had become a great annoyance.

Again, in this case the rapidity of the growth is at variance with the teachings of Mackenzie. He says the duration of life in encephaloid is three years. As to the frequency of growths in this locality, Lenox Browne says they are rare, but when present are usually encephaloid.

Remarks. These two cases present different varieties of cancerous involvement of contiguous parts—one in a man thirty-six years of age, the other in a man of fifty-nine. They ran a much more rapidly fatal course than, from the writings of others, we had been led to consider. In neither case was there a history of hemorrhage or great pain until the last, at which time the second case required large doses of morphine to control the lancinating pains on the side of the neck, ear, and head. In both cases the growth was on the right side. Fauvel states that from his observation the majority of malignant growths primarily in the throat are on the left side. Glandular infiltration in the neck was present in the case where the growth originated in the lower pharynx. In the other, where the larynx was the seat of the growth, at no time was there discovered gland enlargement. This observation is in accord with the statement of Krishaber, in that extrinsic cancer of the larynx (pharyngo-larynx) very early in its course produces glandular in-

filtration, while intrinsic cancer rarely induces cervical gland enlargement. In the case where gland enlargement was present it eventually became the most annoying symptom, since it gave rise through pressure to intense pain. After each attempt at endo pharyngeal removal the glands became rapidly larger. Newman, of Glasgow, has recently noticed the same effect, and therefore argues that on this account operations for removal through the mouth must not be attempted, but the growth should be removed by an operation from without. From careful observation of these two cases, I am led to believe that malignant diseases involving these parts are much earlier fatal than we are led to believe. Therefore, any method to be resorted to for their eradication must be done early, thoroughly, and, preferably, by external incision.—*Dr. J. M. Ray, in Medical Record.*

STROPHANIN.—Strophanthus now holds a recognized and valuable place among the remedies used in the treatment of cardiac complaints, being perhaps only secondary to digitalis. An interesting article was read at the Medical Congress held in Vienna in April last, by Rothziegel, on the active principle of strophanthus, namely, strophanin. An abstract of the paper is published in the *Centrallblatt für Klinische Medizin*, 1890, No. 27. The doses given were 0.0002 to 0.0003 gram, amounting to $1\frac{1}{2}$ to 5 milligrams *per diem*. In English measure this would amount to about $\frac{1}{3000}$ to $\frac{1}{2000}$ of a grain for a dose. It is best given in capsules, and repeated every two hours. Rothziegel sums up his results thus: (1) The circulation was in most cases greatly improved, the pulse became stronger and more regular, a difference being sometimes noticed in from five to ten minutes after the first administration of the drug, but the full effect upon the pulse was not attained until the second or third day of its use. The improvement occurred later than with digitalis; but if the strophanin were continued its beneficial effects were more lasting, and persisted for some time after the drug had been discontinued. (2) The dyspnea, palpitation, and other symptoms occurring in organic disease of the heart were much relieved while the patient was taking this drug. As a rule, the dyspnea disappeared before the palpitation. In cases of so-called "nervous palpitation" strophanin produced some relief, but this was only temporary. (3) The amount of urine secreted was increased, but not until the strophanin had been taken for some considerable period, and, moreover, the quantity passed was not so large as when digitalis or the tincture of strophanthus had been given. The in-

crease in quantity of urine lasted for several days after the strophanin had been discontinued, and was apparently due to increased blood-pressure, and not to any direct action on the kidney. No sign of kidney irritation was noticed at any time. (4) Gastric disturbances, even after prolonged use of the drug, were very rare, and even when such phenomena did appear strophanin could be taken in capsules without any discomfort. As a general rule, the appetite was increased. The condition of the stools was not altered. There was no diaphoretic action. (5) The nervous system was only influenced indirectly, and that favorably, owing to the improved strength and regularity of the heart's action. (6) An accumulative action was not noticed in the case of strophanin, and the drug may be continued for weeks without any ill effects. (7) Subcutaneous injections ($\frac{1}{120}$ grain in watery solution), in cases where the heart's action was very weak, produced a rapid and lasting effect on the pulse, and no unpleasant local effects were caused by the puncture. (8) With the tincture of strophanthus, strophanin compared unfavorably. The tincture acted more certainly, quickly, and energetically than the alkaloid; this was especially noticed in its diuretic action. Cases, however, occasionally occurred in which not only the tincture of strophanthus and digitalis, but also the other cardiac tonics, could not be taken, but in which strophanin was well borne, and the latter was found to be a good substitute for the tincture in such cases. Other instances were also noted in which all the cardiac tonics were ineffectual, while the administration of strophanin was followed by satisfactory results. (9) The indications for the use of strophanin in valvular disease, with or without affection of the myocardium, are the same as in the use of digitalis; that is to say, when there are indications of heart failure. In acute and chronic Bright's disease strophanin produces diuresis, especially if the heart's action is at all weak. *Lancet.*

A CASE OF ERYSIPELATOUS BRONCHO-PNEUMONIA WITHOUT EXTERNAL ERYSIPELAS.—M. Brouardel reports this case of broncho pneumonia, which, as will be seen below, was clearly of erysipelatoous nature. A woman of thirty-seven, who had nursed her master, suffering from facial erysipelas, since December 22d, was taken with rigors and a pain in the side on December 23d, admitted December 24th with pneumonia at the base of the right lung, and died on the evening of December 25th. She showed no trace of erysipelas on the mucous or cutaneous surfaces. At the autopsy a very limited patch of broncho-pneu-

monia, with the usual anatomical characters, was found. Bacteriological examination of scrapings of the exudation, and of sections stained by Gram's method, demonstrated the streptococcus of erysipelas. Characteristic colonies of the strepto-coccus were obtained by cultures, unmixed with any other organism. Injection of three drops of a culture underneath the skin of a rabbit's ear produced a typical attack of erysipelas in the animal, from which it recovered with the formation of an abscess. M. Brouardel believes that is the first case in which the erysipelatous origin of a broncho-pneumonia has been conclusively demonstrated.—*Gazette des Hôpitaux*.

CHARACTERISTIC EFFECTS OF THE VICHY WATERS.—In a recent brochure upon the action of vichy water, Dr. Durand Fardee, of the Académie de Médecine de Paris, says: Their characteristic effects are two-fold:

1. Alterative or diathetic, in conditions marked by an imperfect assimilation of the alimentary principles furnished by the ingestion of the Albuminoids (Gout and Uric Acid Gravel—Diabetes—Obesity.)

2. A resolving action in all the engorgements or congestions of the tissues and organs pertaining to the abdominal and pelvic regions.

The secondary effects are upon: (1) The hepatic system. (2.) Dyspepsia.

The Vichy Waters, therefore, have a medicinal action upon the processes of assimilation and resolution, and upon the liver and digestive apparatus.

Gout; Acute, Articular, Regular Gout. The results to be expected, namely, diminution in severity and postponement of the attacks, are better assured the more robust and healthy the constitution of the patient, and the earlier the attack is anticipated by beginning the treatment.

Uric Acid Gravel. Cessation or amelioration of nephritic colic is accomplished, provided the kidneys are intact. The calculi become smaller or even disappear, and thus are eliminated without provoking painful symptoms.

Obesity. Visceral obesity, that is to say, of the chest or abdomen, is very positively relieved. The effect is less pronounced upon the accumulation of fat in the peripheral regions.

Diabetes. Especially in alimentary diabetes and in those forms associated with obesity. A rapid improvement of all the symptoms is effected, together with a considerable reduction or disappearance of the glycosuria. A subsequent reappearance of the latter symptom in constitutional diabetes does not in general reproduce the previous disturbance of

health, which may perhaps remain in a satisfactory condition for a very long time, provided the treatment be repeated occasionally.

Biliary Calculi and Hepatic Colics. A considerable improvement is the rule, and frequently a complete cure is obtained.

Congestion of the Liver. In simple congestion, chronic hyperemia, the early stages of cirrhosis of alcoholic or malarial origin, or dependent upon venous stasis of the abdominal viscera.

Cachexia. In malarial cachexia or in that catarrh of warm climates, and the sequelæ of dysentery.

Dyspepsia of the atonic variety, or that caused by insufficient secretion of the gastric or intestinal glands.

A Resolving Action upon most of the congestions of the abdominal or pelvic regions, with the exception of scrofulous adenitis.

Resolution. Of congestion of the spleen, of simple congestion of the walls of the stomach (and also of simple ulcer of this organ), of such intra-abdominal tumors as are capable of undergoing this process, iliac and peri-uterine abscesses, and also of congestion of the uterus.

HYOSCINE.—Dr. K. Pavloff has studied the pharmacology of chloride of hyoscine, his results agreeing in the main with those of Sohrt and other observers. Some differences, however, are worthy of note. Sohrt found that there was acceleration of the heart in consequence of depression of all the cardiac inhibitory apparatus, and did not observe any change in the blood-pressure. He therefore thought there was no effect on the vaso-motor center, and this view was supported by Wood. Pavloff, however, finds that at first there is a slowing of the heart in consequence of stimulation of the inhibitory apparatus. In rare cases this effect was produced by exceedingly small doses—0.00005 gram per kilogram of body weight. Afterward the more marked acceleration produced by depression or paralysis of the peripheral inhibitory apparatus comes on; this last is antagonistic to eserine. The blood-pressure was always increased for a longer or shorter time, falling then to normal or even below it. This rise of blood-pressure was due to stimulation of the whole vaso-motor apparatus, and especially to that of the centers in the brain and cord; the subsequent fall is ascribed by the author to weakened muscular force of the heart. According to Sohrt, no effect is produced on the respiration. Pavloff, however, found that it was somewhat retarded in consequence of a depressing action on the respiratory center. He also found that electrical irritability of the cortex of the brain was lowered,

though Sohrt was unable to detect any effect of the kind. Pavloff found that with regard to the salivary secretion hyoscine is antagonistic to pilocarpine, that it has no action on the temperature or on the reaction on the blood, that it diminishes the irritability of the brain, and, to a small extent, the perception of pain, but that it does not effect the tactile sensibility. It rapidly and strongly dilates the pupils, the effect lasting for a long time, and being due to stimulation of the sympathetic. On the whole, its action is very similar to that of atropine, the chief difference being the lowering effect of hyoscine on the irritability of the cortex of the brain. A *resumé* of the literature of hyoscine is given in the form of an analysis of sixty-three articles from various sources, several of them English and American.—*Lancet*.

BACTERIOLOGY OF TYPHOID SUPPURATIONS.

A large majority of authors deny any pyogenic properties of the typhoid bacillus, and ascribe the complications to a "mixed infection" of the patient's system with the specific microbe of enteric fever and various pyogenic bacteria. Of late, however, a series of cases was reported (by Fracnkel, Kocher, Favel, Weichselbaum, Roux, Vinay, Valentini, and Ebermaier) in which a most careful bacterioscopic examination of typhoid abscess failed to reveal the presence of any microbes beyond the typhoid rods. The question naturally arising, "whether the specific typhoid microbe can give rise to suppurative inflammation or not," Dr. Orloff has undertaken a very extensive course of inoculation experiments on rabbits and dogs, which enables him to lay down the following propositions:

1. Injections of "pure cultures" of the typhoid micro-organism into tissues give rise to local inflammation, with round cellular infiltration.

2. When injected into joints, the microbes cause the appearance of a sero-purulent, frequently thick, mucoid effusion.

3. When introduced under the periosteum or into muscles, the bacilli produce round cellular infiltration (chiefly in interstitial connective tissue), followed by partial sloughing, with disintegration or (more rarely) suppuration.

4. A similar infiltration is also observed after injections of the cultures into the testicle, fractured bones, and inflamed subcutaneous cellular tissue.

5. A subcutaneous injection of the bacilli (in dogs) brings about the development of abscess.

6. The injection into a healthy pleural cavity gives negative results.

7. Injections of sterilized (dead) cultures of the typhoid rods are followed by the same mor-

bid phenomena as described *sub* $\frac{1}{2}$, though in a less intense degree.

8. The fact justifies the supposition that phlogogenic and pyogenic properties of the microbes are dependent—at least to a considerable extent—upon some chemical substances (such as Brieger's typhotoxin) developing in the cultures in connection with their vital process.

9. In such cases of suppuration complicating or following enteric fever, where the pus proves to contain the typhoid bacilli alone, the morbid process (suppuration) must be attributed to the latter, and not to Brieger's "mixed infection" (*vide supra*).

10. In mixed cultures, the typhoid microbe does not appear to produce any influence on the vitality of the staphylococcus pyogenes aureus.—*Provincial Medical Journal*.

TREATMENT OF CONSUMPTION.—It is reported that Dr. W. H. Burt, of Chicago, has recently proposed hyper-alimentation and the drinking of very large quantities of water as a cure for consumption. Eight months ago, when reading of the change brought about in the obesity of Prince Bismarck through refraining from the use of water and carbo-hydrates, it occurred to Dr. Burt that an opposite treatment ought to result in the cure of all wasting diseases. He now states his belief that excessive eating and the excessive use of water will cure fifty per cent of all consumptive cases in their first and second stages. He explained at length the tonic influence and power in building up tissue possessed by water, which forms three fourths of the human body, and said that even in health six pints a day were necessary to meet the water waste, and in disease twelve pints.

At a recent meeting of the Chicago Medical Society he is said in the daily papers to have pronounced the bacteria theory, so popular of late, to be pure nonsense. The treatment he proposed consisted in the free use of water every hour in the day, nine hours' sleep regularly, and, if possible, the sea or mountain air. Above all, the patient must look upon the drinking of water as his life. Regarding heredity as the great danger, Dr. Burt advocated the passing by Congress of a law forbidding the marriage of consumptives. With this in force, one hundred years from now, he thought, consumption would not exist in the United States.

ACQUIRED SYPHILITIC NERVE DEAFNESS CURED WITH PILOCARPINE.—J. R. was admitted to hospital on December 26, 1889, with syphilitic ulceration of the pharyngeal arch, of late secondary type—throbbing in ear and

deafness. He could just hear a watch pressed to the right ear, but the sound was not conducted through the cranial bones when the watch was placed over them. He had been deaf for three weeks, but never before. I commenced with one eighth of a grain of pilocarpine, injected into the arms alternately.

On December 31st note says: "He hears watch at four inches from ear; conduction improved through cranial bones; throbbing less; bowels loose; sweats well; is still taking hydr., which he commenced on admission."

On January 6th he could hear a watch at six inches from the ear; bone conduction good, except in parietal region over the ear, where watch is not heard.

On January 16th he heard the watch at eight inches; watch sounds conducted all over the head, and he heard general conversation well.—*E. J. Erskine Risk, British Medical Journal.*

NERVE RESTORATION.—Dr. Glück reported a case before the Medical Society of Berlin lately of a man who was stabbed on the outside of the forearm with a table knife, in August, 1887. The wound was treated in the usual way, but in September complete paralysis of the parts supplied by the radial nerve was found to have taken place. An attempt was then made to reunite the ends of the divided nerve. After careful search for the peripheral and centripetal ends it was found that they were two and one half inches apart, and that they could not be brought together by any possible means. The ends were then freshened and loosened from their surroundings, and indirectly united by means of catgut loops. Healing took place in ten days. Electrical treatment was then carried out under the direction of Professor Bernhardt. In the course of a year complete restoration of function had taken place, which the speaker observed could only have been effected by actual growth of nerve elements along the tract of the catgut threads. *Medical Press and Circular.*

HEMATEMESIS IN A NEWBORN INFANT.—Mr. H. C. Hodges, of Watton, has published the notes of a case, under the care of his father, of hematemesis in a newborn child. The child, after a perfectly natural and easy labor, was born at 5 A.M. At 11 A.M. a very urgent message came that the child had hemorrhage. It was found to be blanched and the pulse very feeble, and the clothes were saturated with bright blood which had been vomited. Absolute quiet was enjoined, and ten minims of hazeline every two hours were ordered. There was no more hemorrhage, but about a table-

spoonful of blood-stained mucus was vomited at 5:30 P.M. Hiccough had been constant since the morning. There was also one rather copious evacuation of blood, besides meconium. The next day the hiccough was less. There was a slight serous discharge from the left ear, and subconjunctival hemorrhage of the left eye. On the second day after birth there was internal strabismus of the left eye. After the third day the symptoms rapidly disappeared and the child got quite well. Mr. Hodges was disposed to think that there had been some injury to the vessels at the base of the skull.—*Lancet.*

METHACETIN.—Dr. C. Seidler tells his experiences of the operation of methacetin. This drug, according to its chemical constitution, is to be considered as a paraoxymethylacetanilid. It is a non-odorous and tasteless rose-red scaly powder, and is easily soluble in water and alcohol. In doses of .3 to .4 or .6 grams it is a very satisfactory antipyretic, but is contraindicated in cases of phthisis florida owing to the sweatings which are brought on frequently by its use. Its nervine and anti-neuralgic properties are not so marked as its antipyretic ones. In the neuralgia of tabetic patients it seemed to fail entirely. In acute and subacute rheumatism of the joints its action was prompt and certain, the fever, pains, and swellings disappearing in a few days and not recurring. Against the prodromal headaches of typhoid and scarlet fevers, of acute gastric catarrh, nephritis, and so forth, it seemed to operate favorably. It causes no disagreeable sequelæ save pretty heavy diaphoresis.—*Edin. Medical Journal.*

ERRATIC PAIN IN LABOR.—At the meeting of the Virginia Academy of Medicine and Surgery, held July 8, 1890, at Richmond, Va., Dr. Johnston reported the following case:

Dr. Johnston had been called, fifteen or twenty days before expected delivery, to a woman, the mother of four children (good labor each time), who complained of a severe pain, paroxysmal in character, occurring on the right side of the neck, and extending down upon her chest to the margin of the axilla. Suspecting the approach of labor, he asked for an examination, but was refused. Early the next morning he was called again, and found the child born. The pains had increased in length and intensity, the intervals growing shorter, until suddenly there was a gush of waters, the birth of the child immediately following. The woman had not a single uterine or abdominal pain, and did not, in the least, suspect the real condition of affairs.—*Virginia Medical Monthly.*

HAY-ASTHMA OR HAY-FEVER is commented on in an article by Dr. John Aulde, in the Medical and Surgical Reporter. As an external treatment, he suggests peroxide of hydrogen with glycerine as a local spray, and in connection with this arsenite of copper in tablets, 1-100 grain in each, one before meals. The following formula also finds favor in many cases:

Nitroglycerin (1 per cent solution).gtt. v.
Tincture of rhus toxicodendron (recent).....gtt. xii.
Extract of grindelia robusta.....f 5 iv.
Extract of berberis aquifolium.....f 5 i
Tincture of prickly ash (with Jamaica rum), q. s. to make.....f 3 vi.

M. S: Take two teaspoonfuls in a little water after meals.

THE TREATMENT OF DYSPEPSIA BY CANNABIS INDICA.—At the Académie de Médecine M. Germain Sée read a paper on the Treatment of Dyspepsia and Certain Other Gastric Affections by Cannabis Indica. He said that the drug should be employed in the extract, at the dose of one third of a grain three times a day. It acts by suppressing the painful sensations experienced after the ingestion of food, and excites the appetite. However, when an excess of hydrochloric acid is present in the stomach, large doses of bicarbonate of soda should be given at the end of the digestion in the stomach; that is to say, four hours after food had been taken. The Indian hemp had no effect on atony or dilatation of the stomach, but it acts favorably on spasm and vomiting of a nervo-motor origin. In the case of pyrosis the effects of the drugs were very pronounced. In conclusion, M. Sée said that cannabis indica was an effectual sedative of the stomach.—*Medical Press and Circular*.

PHENACETIN IN ACUTE RHEUMATISM is commended by Rifat. Given in 15-grain doses three times a day at first, increasing it to 60, 75, and 90 grains in the twenty-four hours if necessary, then diminishing it to 45 grains in the twenty-four hours, has given most excellent results.

THE late International Congress was attended by 8,831 persons, made up as follows: Germans, 5,561; ladies, 1,379; non-medical, 116; Americans, 623; English, 353; French, 171; Italians, 140; Russians, 471; Turks, 12; Portuguese, 5.

LYADA claims that yellow fever did not exist in Cuba until imported with slaves from Africa.

A NEW TEST FOR ALBUMEN IN URINE.—The following tests have been published by Zouchlos (*Rundschau*, 1890), and are recommended on account of their simplicity and accuracy: A solution of 1 part of acetic acid and 6 parts of one-per-cent solution of corrosive sublimate is prepared; to this the suspected urine is slowly added, which at once produces a distinct cloudiness. This test is not affected by peptones, uric acids, or the phosphates. A still more delicate test than the above has been proposed by Zouchlos: Three ounces of a ten-per-cent solution of rhodium potash, with 6 drams of acetic acid; of this a few drops is added to the suspected urine. If albumen is present, there is at once formed a distinct cloudiness, which is insoluble in excess of the solution.—*Virginia Medical Monthly*.

A NEW REAGENT FOR CANE SUGAR, GRAPE SUGAR AND PYROGALLOL.—E. Mathieu-Plessy proposes to fuse together ammonium nitrate, 45 parts; lead nitrate, 34 parts; lead oxide, 21 parts, and when fused cast it in slabs. It contains, when thus prepared, lead para-nitrate fused or dissolved in an excess of ammonium nitrate. To apply the test, a small portion of the reagent is heated until fused, then about 5 mg. of the substance to be tested is dropped on it; glucose gives a cherry red, cane sugar a light brown, and pyrogallol a chrome green color.

SHONGOLOWICZ describes the microbe of granular ophthalmia as a short bacillus, very difficult to stain. Gentian violet is the best stain. Different segments take the stain irregularly, and this has led observers to look upon it as a micrococcus in chains.

WHAT was said to be a genuine case of Asiatic cholera was reported from Atchison, Kansas, July 18th. The patient died within twenty-four hours. The newspapers say that two physicians pronounced the case as undoubtedly Asiatic cholera.

CHOLERA still spreads, and there are rumors of its appearance in several of the great European centers of population. These generally prove to be cases of cholera morbus, viewed through the medium of fear or the desire of cheap newspaper notoriety.

S. QUALE, who recently died at Eau Claire, Wisconsin, left a wish, but no will, that his estate should be devoted to a hospital for cripples in Madison, when its value reached \$1,000,000. His wife has made the desired disposition of his property.

The American Practitioner and News

"NEC TENUI PENNÂ."

Vol. X. SATURDAY, SEPTEMBER 27, 1890. No. 7.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

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A COMMENDABLE EXAMPLE.

During the last few years a number of brave and honest medical men have been enlisted in the different States of the Union in elevating the standard of medical morals and medical education by furthering the legal repression of quackery. The most prominent and efficient of these is Dr. John H. Rauch, of Illinois. To his indefatigable and well-directed efforts the profession and the laity owe a debt of gratitude that is not easy to pay.

So profitable, however, is the practice of conscienceless quackery, and so difficult is it to impress upon people the limitations of therapeutics, that such measures of restraint as health officers can persuade legislatures to enact and courts to enforce have proved quite unequal to the doing away of the evil, and will be so until the people become more enlightened and more thoroughly awakened to their best interests. In the last few years there has arisen in the Empire State of Texas a very Joshua to take up the work so well begun by the Moses of Illinois, and to push it by direct assaults on the enemy's strongholds. In Dr. J. R. Briggs, of the Texas Health Journal, has appeared a champion in the cause of honest medicine against quackery and quacks, who is accomplishing more by his

labor and example in this direction than all other medical journals together. Other journals speak out boldly, but they do not reach the people, and their shots are fired in an aimless, irregular way that permits of easy escape on the part of the medical brigands and marauders. But Dr. Briggs, indefatigable in labor and fearless in action, is accustomed to single out by name the frauds that invade the Lone Star State and many who do not, and gathering up from all parts of the country the record of disreputable history, lays it before the people in such a way that he makes their stay in his neighborhood unprofitable, and in most cases succeeds promptly in driving them out of the country.

In the case of some more than usually obdurate quacks who visit Dallas, it has become necessary to distribute thousands of reprints among the people showing up their rascalities in other places. He is a veritable Brownlow of the press, and come from whatever corner of the land he may, the traveling quack soon finds himself confronted in print with "all that he ever did." Personal assaults upon him have been essayed by hired bullies, but these found editor Briggs as ready with the shotgun as with the pen, and hereafter there is good reason to believe quacks will sit down, reason together, and count the costs before deciding to invade the city at the three forks of the Trinity.

But what is more unusual is the great interest the laity of Texas take in this warfare against quacks. Large numbers of the Texas Health Journal are subscribed for outside of the profession on account of the good work being done by it in behalf of the people. As for the medical profession, they seem well-nigh a unit in their indorsement of the work of Dr. Briggs. A medical society in that State hardly seems to think it has done its duty if its session draws to a close without an encouraging resolution for Dr. Briggs in his warfare against these bandits of the pill-bags.

But better still, his example is beginning to be followed by other journals, and even by some of the secular press. A notable example of this is the case of a well-known dispenser of muddy metaphysics and fraudulent secrets for the preservation of health.

Dr. Briggs vigorously exposed this fellow's shameful methods, and now he has been joined by both medical and lay journals from Maine to Texas. A few more such bold, courageous, and aggressive journals in each section of the country would soon break up the calling of these peripatetic quacks and necessitate their engaging in some form of felony more amenable to the law.

MISSISSIPPI VALLEY MEDICAL SOCIETY.—Louisville opens wide her doors and the hearts of her citizens to welcome the members and visitors who are coming to the meeting of this young giant of the West. The guns are loaded, the locks are primed, the speeches are composed, and the viands are in the fire, while the bottles are awaiting fervently the manipulations of the jerker. It goes without the saying that the welcome will not fall short of the old Kentucky standard.

Notes and Queries.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION. The sixteenth annual meeting of the Mississippi Valley Medical Association will be held at Louisville, Ky., Wednesday, Thursday, and Friday, October 8, 9, and 10, 1890. The programme is complete and embraces the names of many prominent men in America.

WEDNESDAY—MORNING SESSION.

Address of the President, Joseph M. Mathews, M. D., Louisville, Ky.

On Infectious Dyspepsia and its Rational Treatment by the Antiseptic method, Frank Woodbury, M. D., Philadelphia, Pa.

Help and Hindrance to Medical Progress, John H. Hollister, M. D., Chicago, Ill.

Therapeutic Uses of Cardiac Sedatives in Inflammation, H. A. Hare, M. D., Philadelphia, Pa.

Mechanical Obstruction in Diseases of the Uterus, George Hulbert, M. D., St. Louis, Mo.

The Construction of Bacteria, J. T. Whittaker, M. D., Cincinnati, O.

A Fatal Case of Vomiting after Laparotomy, T. A. Reamy, M. D., LL. D., Cincinnati, O.

The Surgical Treatment of Uterine Fibroids, R. Stansburry Sutton, M. D., LL. D., Pittsburgh, Pa.

Fracture of the Lower End of the Radius, P. S. Conner, M. D., LL. D., Cincinnati, O.

Coffee, its Use and Abuse, I. N. Love, M. D., St. Louis, Mo.

Treatment of Fracture of the Forearm by Extension, Counter-extension, and Fixed Supination, X. C. Scott, M. D., Cleveland, O.

Prof. Flint's Doctrine of the Self-limitation of Phthisis, Wm. Porter, M. D., St. Louis, Mo.

WEDNESDAY—AFTERNOON SESSION.

Cough, its Relation to Intra-Nasal Disease, A. B. Thrasher, M. D., Cincinnati, O.

A Case of Rhinoplasma; operation, A. H. Ohmann-Dumesnil, M. D., St. Louis, Mo.

A Paper, W. W. Dawson, M. D., Cincinnati, O.

Chronic Diseases of the Joints, Joseph Ransohoff, M. D., Cincinnati, O.

Cases of Penetrating Stab Wounds of the Abdomen, Laparotomy results, H. C. Dalton, M. D., St. Louis, Mo.

A Paper, W. H. Daily, M. D., Pittsburgh, Pa.

Gastro-Enterostomy, George Cook, M. D., Indianapolis, Ind.

Torsion of Arteries as a means for the Arrest of Hemorrhage, J. B. Murdock, M. D., Pittsburgh, Pa.

Paper, Willis P. King, M. D., Kansas City.

The Psychic Sequences of an Entailed and Chronically Acquired Alcoholism, C. H. Hughes, M. D., St. Louis, Mo.

A Résumé of Experience to date, all over the world, in the various Operations of Cystitis from Prostatic Hypertrophy, W. T. Belfield, M. D., Chicago, Ill.

Fevers and their Treatment, C. G. Comegys, M. D., Cincinnati, O.

WEDNESDAY—EVENING SESSION.

Address, by John A. Wyeth, M. D., New York.

THURSDAY—MORNING SESSION.

Bromide Eruptions resembling Syphilitic Lesions, Wm. T. Corlett, M. D., Cleveland, O.

Original Investigation in Medicine in the

United States, Frank S. Billings, M. D., Chicago, Ill.

Acute Ascending Paralysis, Joseph Eichberg, M. D., Cincinnati.

Inguinal Colotomy, with report of a case, Arch. Dixon, M. D., Henderson, Ky.

One Danger that threatens the Physical Deterioration of the Whites in America, E. A. Wood, M. D., Pittsburgh, Pa.

Urea and Serous Membranes, C. S. Bond, M. D., Richmond, Ind.

Hypnotism in its Relation to Surgery, Emory Lamphear, M. D., Kansas City.

Certainty in the Diagnosis of Tuberculosis, Theodore Potter, M. D., Indianapolis, Ind.

Bunions, Robert T. Morris, M. D., New York.

The Hypodermatic Use of Arsenic, Harold M. Moyer, M. D., Chicago, Ill.

Fractures of the Lower End of the Humerus, their results and medico relations; Reuben A. Vance, M. D., Cleveland, O.

A Review of the Treatment of Varicocele, with cases, G. Frank Lydston, M. D., Chicago, Ill.

Arthrotomy in old Dislocations of the Elbow, with report of case, Joseph W. Marsee, M. D., Indianapolis, Ind.

THURSDAY—AFTERNOON SESSION.

Perineal *versus* Suprapubic Cystotomy, H. O. Walker, M. D., Detroit, Mich.

Herniotomy, with report of three novel cases, B. Merrill Rickets, M. D., Cincinnati, O.

What a Doctor should Not Expect, A. N. Ellis, M. D., Cincinnati, O.

An examination of the pupils of the Kentucky Institute for the Blind, with special reference to Causation and Blindness, J. M. Ray, M. D., Louisville, Ky.

Myopia, A. R. Baker, M. D., Cleveland, O.

Some remarks on the Prevention of Myopia, Francis Dowling, M. D., Cincinnati, O.

Malnutrition in Eye Diseases, J. E. Harper, Chicago, Ill.

Absence of the Choroidal Blood-vessels and Pigment Affecting both Eyes, M. M. Cowgill, M. D., Paducah, Ky.

A Paper, H. H. Mudd, M. D., St. Louis, Mo.

Two cases of Tubal Pregnancy, operation,

recovery, Edwin Walker, M. D., Ph. D., Evansville, Ind.

Treatment of Organic Stricture of the Urethra, Seaton Norman, M. D., Evansville, Ind.

Exercises in the Treatment of Lateral Curvature of the Spine, George W. Ryan, M. D., Cincinnati, O.

FRIDAY—MORNING SESSION.

Antipyretics, F. C. Woodburn, M. D., Indianapolis, Ind.

The Difficulty in diagnosing a twisted Ovarian Pedicle in Uterine Myoma, report of a case, Edwin Ricketts, M. D., Cincinnati, O.

The Treatment of Organic Stricture of the Urethra with special reference to Perineal Urethrotomy, Jacob Geiger, M. D., St. Louis, Mo.

Summer Complaint in Children, Lyman Beecher Todd, M. D., Lexington, Ky.

Neurasthenia Femineus, a fashionable disease, Amos Sawyer, M. D., Hillsboro, Ill.

Treatment of Epilepsy, Philip Zenner, M. D., Cincinnati, O.

Internal Urethrotomy, with cases, J. V. Prewitt, M. D., West Point, Ky.

Lacerated Wound of the Axilla from a Barbed Wire, G. N. Rowe, M. D., Randall, Kas.

Three cases of Intestinal Obstruction, with remarks, David Barrow, M. D., Lexington, Ky.

Was it Relapsing Fever? A. D. Barr, M. D., Calamine Springs, Ark.

When to operate in cases of Rupture, Ectopic Pregnancy, C. A. L. Reed, M. D., Cincinnati.

Extra-uterine Pregnancy, with report of case of four years and three months duration, complicated with Entero-uterine Fistula, R. R. Kime, M. D., Petersburg, Ind.

FRIDAY—AFTERNOON SESSION.

Dermoid Cysts of Ovary, with report of cases, W. H. Wathen, M. D., Louisville, Ky.

The Application of Antiseptic Method in Midwifery Practice, L. S. McMurtry, M. D., Louisville, Ky.

Inflation of Hydrogen Gas for Diagnosis *versus* Exploratory Laparotomy in Intestinal Obstruction and Wounds of the Abdominal Viscera, J. G. Carpenter, M. D., Stanford, Ky.

The Tonsil, G. V. Woolen, M. D., Indianapolis, Ind.

Cerebral Syphilis, with report of a case, Frank R. Norbury, M. D., Jacksonville, Ill.

Simple Ovariectomy, Orange G. Pfaff, M. D., Indianapolis, Ind.

The Treatment of Intermittent Fever, Robert C. Kenner, M. D., Louisville, Ky.

Tuberculosis, Syphilis, Rheumatism, and Pelvic Hyperesthesia, J. A. Cutter, M. D., New York City.

Treatment of Gonorrheal Rheumatism, Ap Morgan Vanee, M. D., Louisville, Ky.

The Advantages of Attending Medical Societies and of Reading Medical Journals, T. B. Greenley, M. D., West Point Ky.

Cerebro-Spinal Concussion, J. F. Barbour, M. D., Louisville, Ky.

Volunteer Papers.

THE EIGHTH ANNUAL MEETING OF THE AMERICAN RHINOLOGICAL ASSOCIATION will be held at the Galt House, Louisville, Ky., October 6, 7, and 8, 1890. The profession is cordially invited to attend the meetings of the Association.

Officers: President, Arthur G. Hobbs, M. D., Atlanta, Ga.; First Vice-President, A. B. Thrasher, M. D., Cincinnati, O.; Second Vice-President, E. R. Lewis, M. D., Indianapolis, Ind.; Secretary and Treasurer, R. S. Knode, M. D., Omaha, Neb.; Librarian, John North, M. D., Toledo, O.

Members of Council: A De Vilbiss, M. D., Toledo, O.; J. G. Carpenter, M. D., Stanford, Ky.; A. B. Thrasher, M. D., Cincinnati, O.; C. H. Von Klein, M. D., Dayton, O.

The following named railroads have granted rates of one and one third: Louisville & Nashville, Queen & Crescent, Louisville Southern, Newport News & Mississippi Valley Company, and the Ohio & Mississippi. These tickets are good for the week, and will include the Mississippi Valley Medical Association, which meets Wednesday, Thursday, and Friday of the same week. Be sure and take a certificate from each and every ticket agent from whom you purchase a ticket on your way to Louisville. Present this to the secretary for countersign, when you will be entitled to return at one third fare.

CINCINNATI CORRESPONDENCE.—The order of Deaconesses has a strong advocate in the person of Dr. E. C. Zinke. This is a German organization for the training of nurses for the sick, be they rich or poor. The rich, he said, could not get competent nursing because the demand largely exceeded the supply. The poor could not get it for love or money, for both were scarce with them. He considered that the physicians of this country and a suffering people in general had a great lack of competent nurses. In a recent address for the benefit of this order he gave a careful history of its origin, growth, and development. Lodges organized for the benefit of the sick do a good work, but nurses supplied in rotation this way are not always very useful. He gave a graphic description of nursing by friends and relatives, where one advised this, the other that. All display a sincere interest and kind spirit, but seldom, very seldom, do they know properly the function of a nurse and frequently do more harm than good. The doctor was speaking to a German audience, and said: We are justly proud of our German origin and descent, but we also rejoice that we have become Americans. We esteem the land of our fathers in the sense in which well-trained children esteem their parents, but we stand by the land of our adoption as an honorable man should by the wife of his bosom. We owe to our adopted country our entire strength, our noblest thoughts and feelings, and our most affectionate attention.

Dr. J. T. Whittaker was married during the summer vacation to Miss Virginia Joy, of St. Louis. The doctor and his bride took a trip to Europe, which is said to have been a very joyous one. It is said that when the doctor went to ask for his bride he was so filled with joy that his tongue, usually his most obedient servant, was paralyzed with joy. The old gentleman, seeing his embarrassment, surmised his wishes, and said: "Well, I don't care a Whit—tak'er." The doctor's friends, who are legion, wish him and his wife a long and joyful married life.

Dr. S. C. Ayres has returned from the Rocky Mountains, where he went to escape the hay-fever.

Dr. L. J. Krouse has returned from New

York, where he spent six weeks looking up the latest in his specialty.

Dr. A. W. Johnstone, of Danville, Ky., has removed to Cincinnati, and is in partnership with Dr. T. A. Reamy in his private hospital for women.

The Cincinnati Obstetrical Society held its September meeting at the residence of Dr. E. S. McKee. The subject for discussion was, Obesity in its Relation to Menstruation and Conception, which was opened by a paper by Dr. McKee. The next meeting will be held at the residence of Dr. T. A. Reamy, the third Thursday evening in October, deferred one week because a number of members will be in attendance at the Mississippi Valley Medical Association at Louisville, October 8, 9, 10, 1890.

Drs. Max Thorner, Max Kochler, W. W. Seely, and W. M. Roads have returned from the International Congress at Berlin.

Dr. W. S. Christopher, Demonstrator of Chemistry, Medical College of Ohio, has been called to the chair of Theory and Practice, University of Michigan, and has departed for his new field of labor.

T. A. Reamy, M.D., LL.D., in a recent clinical lecture, said that in the treatment of cancer no modern surgeon would think of relying on general constitutional remedies, except in cases where the knife could not be used. The various remedies supposed to have a specific constitutional effect in cancerous diseases are iron, arsenic, etc., remedies which only act as tonics, improving nutrition. Chian turpentine, highly recommended by Clay, has never given any results except in his hands. Virchow says it does no harm to try these things, as we may possibly hit upon a specific some day. Caustics were formerly used in preference to the knife. They are now used both by the scientific surgeon and the empiric, but by the former they are generally employed only when the knife can not be used. Both ancient and modern caustic "cancer cures" all contained more or less chloride of zinc, a remedy which should only be used by the experienced. Modern surgeons prefer the knife, as already stated. The only trouble is, that the present tendency is to be too radical—to remove entire organs where it is just as well to remove portions, and

to undertake operations on the internal viscera which are brilliant, showing the marvelous possibilities of surgical operation, but shortening the patient's life, therefore, only to be condemned. While we should always cut wide of the affected part in the sound tissue, we should consider whether the ultimate effect of the operation will not be as good if it is partial instead of radical. If cancer is recognized at its inception, and we can learn to tell with certainty that it is absolutely limited, surgery will grow more conservative, though not less brilliant, than at present. The immunity from immediate danger rendered by antiseptics has possibly made surgeons too bold, and they will now attempt any thing. A large clinical experience justifies the statement that when the disease can not be entirely removed the patient will live longer if untouched. It places the surgeon in a very responsible position to decide when to adopt a measure which on the one hand may save a life, on the other destroy it. The outlook is encouraging. We know more about the nature of cancer macroscopically and microscopically than we did ten years ago. Though no specific bacillus has been found, nor a specific remedy for such bacillus, such an authority as Virchow thinks their discovery possible to the future. Sir James Paget confidently predicts that the specific cause, probably a bacillus will be discovered in the near future. The detection of the specific cause at once renders the prevention of the disease possible. We recognize incipient malignant disease now more promptly than formerly, and deal with it more promptly, radically, and successfully. Early recognition, and early and decisive treatment constitute the main advances in our work in this field. The mortality from surgical interference has decreased and is decreasing wonderfully, and the statistics, if not of permanent cures, at least of life prolonged, pain and anguish lessened, are most encouraging. Judging the future by the past, have we not good reason to hope that the pathologist will yet, at probably no distant day, fathom the secrets of this horrible and fatal malady, and that surgeons will finally triumph over this deadly foe to human life and happiness?

E. S. M.

THE MEDICAL POLITICIAN.

An Original Contribution to Medical Society Literature.

BY THE MEDICAL MAN IN THE MOON.

The medical politician is one who for self-aggrandizement pushes himself and friends to the front, captures all the offices of the medical societies, courts the notoriety of the newspapers, and is about as reliable as the average ward bumner in municipal politics. His *forte* is the country practitioner, and among his followers at medical gatherings one can always find a group of these to whom he has unfolded his piteous tale and whose sympathies he has thoroughly aroused. He says, "You see, my dear fellow, our mutual friend McClung has worked harder for the society, written more articles, and received less recognition than any man in it. He is the man for president; and unless you are influenced by that crowd of jealous fellows, headed by Drs. Smith and Jones, you will vote for him. Now, my dear boy, Smith and Jones have not done a thing for this society. As long as we have had charge of it they have kept away, and all at once they step forward and oppose our candidate. What is the matter with our candidate! He's all right!!! Let's take a drink. Did you hear the last story about——," and away they go, the country practitioner innocent of the undercurrent of medical politics, firmly convinced that his friend is his friend, is a good fellow, and is about to be shabbily treated by others envious of him. These others are usually men who stand and have stood at the head of the profession, men who want to go to medical societies for the mental benefit obtained, and who are sick to death of medical politics. These latter never have a candidate of their own; they only ask for a man who can not be controlled by cliques, a just man whom the office seeks. Who ever heard of the office seeking a medical politician? Yet, like the june-bug of classic fame, he gets there all the same. But he, the medical politician, will assure you that he "never asked a vote." True, it was his brother Isadore, his *fidus Achates*, who has circulated among his friends and practically secured his election before the

majority of the convention had given the matter a thought; before the programmes are printed this Macedonian Phalanx has met, armed itself for the fray, and sworn to elect their chosen brother at any cost. They believe in the good old democratic doctrine of rotation in office, and so, in their secret meetings, pitch it from one to another; and fearing they may be suspected, go out and cry "Stop, thief!" at some one else, so that attention may be diverted from themselves. With an air of injured innocence they assure their dear friend, the country practitioner, that they never dreamt of the office, and, had this unexpected and unholy opposition not shown itself, they would not accept it; but now that the other side want to make a factional fight of it they were ready to trust themselves to their friends, who would see that they were not brutally slaughtered.

And the opposition—what are they doing? Are they, profiting by past experience, choosing a candidate whose hands are free from stain, whose record shows him to be a sober, industrious man, zealous in his profession, and upright in his dealings with all, an unselfish man, who is proud of his profession and is uplifted by it, a man who seeks eminence only from the excellence of his attainments and the righteousness that is within him? Are they about to present such a man—a few of whom can be found in every community? Not at all!—not at all! They are doing what they have done in many past conventions. They come trustingly, confidently, only to be again amazed, overwhelmed at the audacity of the veteran gang, the politician and his little candidate. It is too late to fight. What can a small group of honest men do against the battle-scarred veteran of many political fights. They go home in disgust, vowing to keep away from such assemblies again. The good men are becoming more and more rare at our medical conventions. The number of hungry, aye, ravenous politicians is increasing; their voices grow louder, and modest merit hides its face and blushes.

"But," asks some one, "what good can this do the politician?" We answer, that a large part of the world, that part from which the politician derives his sustenance, is ignorant of the true inwardness of medical associations, and

their attention is called to these men whom their profession delight to honor. These modest men are not slow to inform their friends and the world at large how they have been chosen above the many. And how natural it is for the deluded world to think that it is their professional merit that has brought them to such a pitch of greatness.

Every one can not be a medical politician any more than a ward healer. There are certain qualities which must be born to him, others must be acquired, and all must be blended to make an harmonious whole. Given the proper qualifications, natural and acquired, and a few conventions of experience, and we have a figure unique, but alas! too common in medical societies. A type? Let us see. He must be bright with a superficial brilliancy that deceives those of less intelligence. He must know a little of every thing, and be wise enough not to venture beyond his depth unless he is certain that his hearers know much less of his subject than he; then he can flounder around in shallow water, and they will believe he is swimming far out into the ocean.

He has a practice, of course—such men always will—and usually a good one. Was it not Aristotle who said, "*Mundus vult decipi*"? He is usually a jolly fellow, with a bright, pleasant laugh, and ready to please by using it. He can listen to an old story as if he never heard it before, and tell you a new one that he has carefully treasured up for just such an occasion. He is usually a liberal fellow in money matters, and when you are visiting the city in which he resides, he will treat you royally; he will dine you and wine you, and stay out late with you, while you, living in the country can do nothing for him—except send him your patients and vote for his man. He has a great deal of tact—*tact* is his strong point. If you are a churchman, he can talk theology, morals, and sentiment from a lofty pedestal, and you will look up and say, "Ah, McClung is indeed a great man!" But if you are a little worldly—if, when away from your routine work you wish to break the monotony of your life by adventures wild and weird, deeds of darkness and acts that must not be told at home—beware! he has got you sure—

he will own you forever, and you will be a willing slave. He really *does* know how to have a high old time. He can take you where the cuisine is of the finest, and the whisky is the oldest, and the Cyprians are the youngest. When you, weary and worn, meet him at his office next morning, he is fresh and charming, his smile the most attractive, his hand-shake the most cordial.

Scarcely are you at home when the mail brings you his last reprint, and in ten days another, a week after a third, until you are forced to say, "McClung is a smart man—an industrious man—a very learned man."

Have you ever taken up the reprint for a critical reading? If so, you will be surprised by these facts: first, how many pages can be written without conveying any meaning; second, how many axioms in medicine the writer can lay before you as facts discovered by himself, and third, how much and how boldly he can steal from other writers and not give them credit. The writer remembers to have gone, some ten or twelve years ago, with an honest old practitioner, to hear one of these politicians deliver before a medical society a "lecture" on a medical subject; we had seen several notices of the intended "lecture" in the daily papers, although for years previous a "paper" had been read before that society every week. We listened patiently and attentively to descriptions which were old in Galen's time, to differential diagnoses which Paracelsus would have laughed at. But when he came to treatment, and advised measures that have been accepted as necessary since the dawn of medical science, when he rolled out sonorous platitudes, axiomatic truths with all the force and energy, with all the earnestness and impressiveness of a new discovery, it was too much for the venerable gentleman (now long since gathered to his fathers), and he grew restless, and soon slipped out of the hall, the writer following him.

We walked in silence for some time, until the writer asked him timidly how he liked the profound method of treatment which the brilliant and original "lecturer" had recommended. The answer was curt and sharp. "It was," said he, "*like saying that when you cir-*

cumcise a man always cut off his foreskin." Yet a great majority of those who heard the "lecture" were taken in by the undoubted oratorical powers of the speaker and the impressive earnestness with which he told his intelligent audience that two and two made four. They thought the "lecture" was unusually good, and stayed away from the next meeting, when a deep thinker and original investigator read a paper that would really have taught them something.

As we skim over the vast amount of medical literature contained in the journals we are all too apt to think that he who writes most knows most, and taking advantage of this fact the medical politician fairly revels in articles. If he can only evolve something from his inner consciousness or discover in his superficial reading one little fact that you did not know before, you will believe that in his massive brain are hidden other and mightier secrets, the result of indefatigable labor. To those who are not thrown into daily intercourse with him our medical healer may appear genuine and a man of mark. To those who meet him often, who hear his papers read at local societies, who see his *suaviter in modo, dulciter in re*, and above all his actions in medical conventions, he appears in his true colors, a selfish impostor, a medical adventurer, an obstacle to the advance and dignity of the profession.

It is the medical politician who seizes upon young Dr. Rusticus, and after the usual friendly greetings, flattering from one so great, gently insinuates that Dr. Loomis is an old mossback, and not fitted for the presidency—that Dr. Flint is a fossil, while Dr. Gross is a hundred years behind the times. "What we need," he goes on to say, "is a progressive young man, one who has worked hard for the society, and *McClung is your man.*"

What shall we do to awaken a real interest in medical societies, to get back the men of real knowledge and experience, who are now conspicuous by their enforced absence? It must be evident to any close observer that the first and most imperative action must be the expulsion of that pestilential creature, the medical politician. He only seeks self-aggrandizement; deprive him of it. His papers are either vapid

or stolen; expose him; hold him up to ridicule or scorn. Do not allow yourself to be guided entirely by your sympathies. Use your vote as intelligently as you do in the affairs of the nation, and vote for no man for any office who by his dignity, honor, and intelligence is not fully able to fill it. Spurn any man who directly or indirectly solicits your help to office; reject any one who is so hopelessly entangled in cliques that his judgment and official acts are bound to be biased. Show your contempt for the medical politician, and ask yourself, the physician, what do I owe him as a physician?

When these things are done your meetings will be quiet and orderly, and will fulfill the object for which they are intended. Your active members, your speaking and reading members will be those who have contributed most to the noblest of professions, learned and honorable gentlemen, compared to whom your medical politician is as the scum of the earth.

THE GUSTATORY SENSE OF TASTE.—An exchange says that it is not equally distributed over the whole surface of the tongue. "There are three distinct regions or tracts, each of which has to perform its own special office or function. The tip of the tongue is concerned mainly with pungent and acid tastes; the middle portion is sensitive chiefly to sweets or bitters, while the back or lower portion confines itself entirely to the flavors of rich, fatty substances. This subdivision of faculties in the tongue makes each piece of food undergo three separate examinations, which must be successively passed before it is admitted into full participation in the human economy."

GODFREY recommends periodate as a general disinfectant application, especially to cancers; also as a spray in whooping-cough, and in the early stages of tubercular consumption. Great improvement followed its use in all of the nine cases of phthisis in which it was used. It is not toxic to human beings, but is a more powerful germicide than sublimite. Internally it may be given in a pill, 2 to 4 grains thrice daily; and to children in solution made by boiling 1 grain in an ounce of water.—*Medical Press.*

THE ORIGIN OF MAN AND ANIMALS.—The arguments drawn from the experimental facts of variation and natural selection, from the observed progression of animal forms in successive geological strata, and the like, seem to me inadequate to explain the development of insects, fishes, birds, mammals from one stock. Consequently, to my own mind it is a relief to be able to think of several, and, if of several, then possibly of any number of original germs. Let us then adopt provisionally the hypothesis of a multiplicity of germs of life; and if we do this, there is nothing wild or strange in the supposition that the germ of man was different from other germs. It would be beyond all that scientific caution would justify to assume that, given a number of original germs of life, it is a matter of chance into what each will develop. It is contrary, I think, to the whole analogy of nature to suppose that a living germ, which is, to all intents and purposes, an ovum or egg, may ultimately develop into an oak, or a fish, or a man, according to its surroundings or according to mere chance. At all events, it is much more probable, much more according to analogy, that each germ should have its specific character, and that so man should have been man in intention and preparation from the very beginning of things. *From "Wallace on Darwinism" by the Lord Bishop of Carlisle, Popular Science Monthly.*

MALARIAL FEVER AND EUCALYPTUS DRAINAGE.—The planting of eucalyptus trees for the purpose of draining the soil in malarial districts is one which has met with some success. The Trefontane Convent at Rome had become positively uninhabitable, owing to the malaria which attacked, in many instances with fatal results, its inmates. Senator Torelli presented a bill proposing that the estate annexed to the convent should be planted with eucalyptus as an experiment against malaria. The bill was passed, and the Trappist monks planted thousands of the eucalyptus plants of all species on the estate. But still the malaria raged, and several monks suffered severely. It was, however, remarked that it was only the monks who had their cells looking on the central cloister who fell victims to the malaria. This suggested

the idea of planting four eucalyptus trees at the four corners of the cloister. The plants, sheltered from the winds, soon grew to a great height. The immediate result was the complete draining of the soil in the cloister, and the disappearance of malarial fever from the convent.

PHENACETINE FOR INSOMNIA.—Dr. F. Peyre Porcher, of Charleston, S. C., writes to the New York Medical Record, July 12, 1890: "I desire to call special attention to the extreme value of phenacetine as a remedy for insomnia. Given at night in a little water it is tasteless, innocuous, and induces sleep. I am confident, also, after repeated trials, that it is the best and most unobjectionable substitute for morphia. It causes sleep when, of course, pain is in abeyance, unless the pain be more than ordinary, and morphia hypodermically may then be required. The remedy may be repeated and the dose increased to seven or ten grains.

"Suffering from chronic rheumatism of the forearm, I have tested it repeatedly in my own person, and have given it to many who have suffered from insomnia, or inability to sleep from any transient cause, fatigue, nervousness, excitement, etc., in either sex.

"I see that sulphonal has recently been advised. No accusations have ever been made against phenacetine, whereas, sulphonal, antipyrin, and antifebrin have at times been found to possess toxic qualities.

"I have made comparative tests of the four agents, and believe that phenacetine has a great future for the two purposes above indicated. It may also be used in children who are sleepless from fever or excitement."

ANTISEPSIS AT BILLROTH'S CLINIC.—In a work recently published, Dr. von Hacker describes the antiseptic methods of wound treatment employed at Prof. Billroth's clinic at Vienna. The iodoform gauze dressing enjoys the preference not only in the treatment of simple wounds, but also of wound cavities, lacerated wounds, ulcers. Over the gauze is applied a layer of sterilized gauze and then a cushion of wood-wool. The advantage of this dressing is that it can be allowed to remain for a long

time, and that it absorbs the discharges. For irrigation of the field of operation and cleansing of the hands, sublimate in 1-3000 and 1-1000 solutions is employed; sprays are used to disinfect the air in laparotomies. The instruments are placed in carbolic-acid solutions. Antiseptic silk serves almost exclusively for ligatures and sutures. It is preserved in five-per-cent carbolic acid solution, and before use is immersed in two-and-a-half-per-cent carbolic-acid solution. Catgut preserved in one-per-cent alcoholic solution of sublimate is used only for the continuous peritoneal suture in laparotomies. Sponges are seldom employed, pieces of gauze being used as a substitute. They are kept in 1-1000 sublimate solution, and before operation are wrung out thoroughly from a 1-3000 solution of sublimate.—*Prager Medicinische Wochenschrift*; *International Journal of Surgery*.

BAD BREATH.—Dr. Frank H. Gardner, in the *Dental Review*, speaks of the causes of bad breath. He concludes: First, decaying particles in the mouth as far back as the pharynx vault taint the breath, if exhaled, very little if at all. Second, mouth-breathers have a bad breath when the tonsils are enlarged, or when cheesy masses exist in the tonsillary mucous folds. Third, certain gastric derangements taint the breath only when gases are eructated through the mouth. Fourth, the principal cause of bad breath is decomposition in the intestinal canal, the retention of fecal matter in the transverse and descending colon, and the absorption of gases into the circulation, finally exhaled by the lungs. Fifth, catarrh, nasal, pharyngeal, or bronchial, causes bad breath. Sixth, medicines or ailments which undergo chemical changes below the esophagus may, by rapid absorption through the stomach walls, or immediately below, give to the breath the characteristic odor. Bad breath is often a source of serious annoyance to the patient, and the fact that it has more than a local cause is too often ignored by the physician, who therefore fails to cure it.—*Buffalo Med. and Surg. Journal*.

LYSOL.—At the meeting of the Society of Physicians of Vienna, May 23, 1890, Dr. V. Gerlach spoke of a new disinfectant, lysol, de-

rived from tar oils by boiling with alkalies and fats. Comparative tests as to the germicidal powers of lysol, carbolic acid, sulphurous acid, and creolin upon the spores of anthrax bacilli, the staphylococcus pyogenes, and cocci of erysipelas showed the former to be possessed of special advantages. Lysol appears to be perfectly innocuous, and has been administered subcutaneously to rabbits in amounts of half a dram daily during fourteen days without causing death. It has been successfully employed in surgical operations and for vaginal and uterine irrigation. On wounds it has no irritant effects, but when applied to mucous surfaces in 1-2 per cent solutions it causes slight transient burning. A 0.3 per cent solution is sufficient to destroy all the organisms present in wounds within thirty seconds, and a one-per-cent solution is a good general antiseptic. In three-per-cent solutions it has the properties of a soap, and acts as an excellent disinfectant of the hands.—*Wiener Medizinische Wochenschrift*; *International Journal of Surgery*.

At the recent meeting of the American Otological Society the following officers were elected: President, Dr. Gorham Bacon, of New York; Vice-President, Dr. Huntington Richards, of New York; Secretary and Treasurer, Dr. J. J. B. Vermyne, of New Bedford, Mass.; Committee on Membership, Drs. Arthur Matthewson, of Brooklyn; Samuel Theobald, of Baltimore, and S. D. Risley, of Philadelphia. Committee on Publication, Drs. J. J. B. Vermyne, of New Bedford; Dr. C. J. Blake, of Boston, and Dr. J. Orne Green, of Boston. The following were elected to membership: Dr. Frederick L. Jack, of Boston; Dr. J. B. Shapleigh, of St. Louis; Dr. Benjamin J. Baldwin, of Montgomery, Ala.; Dr. J. M. Ray, of Louisville, Ky.; Dr. F. W. Ring, of New York.

PLUMBISM AND ALCOHOLISM.—At a recent meeting of the Academy of Sciences, M. Charcot read a note on some experiments in plumbism carried out by MM. Combermate and Francois. They caused from one to five centigrams of carbonate of lead to be consumed daily by animals. At the end of about a

month the nervous symptoms of saturnine poisoning made their appearance—such as epileptic fits, delirium, etc.—just as they are observed in man. This was, of course, not new; but the interesting point was that in certain of the animals experimented upon the administration of large doses of alcohol was found to hasten in a remarkable manner the advent of the nervous symptoms. The same thing was noticed when others of the animals were subjected to any abrupt emotional shock, such as fear. These facts were worthy of note, for in man a similar preeocicity of the nervous phenomena of plumbism was observed whenever those already suffering from lead poisoning were subjected to a moral shock or became addicted to alcohol. *Lancet*.

THE Board of Health of Philadelphia, in its last annual report, recommends the selection of a site or sites for a municipal hospital or hospitals at an early day. It also recommends that the Health Officer, Lazaretto and Port Physicians be appointed by the Director of Public Safety, instead of the Governor, and suggests that the Health Officer should be a man with thorough medical training and a high order of executive ability.

A SENSATION was caused in London, August 19th, by the announcement that there was a case of Asiatic cholera in London. A man landed on August 17th from the steamer Duke of Argyll, from Calcutta, which had just arrived at this port and went to a coffee-house, where he secured lodgings. On August 19th he was carried on a stretcher from the coffee-house to Popular Hospital, where the doctors pronounced his case one of Asiatic cholera.

THE British war ship Buzzard arrived at Halifax, August 24th, from Jamaica with yellow fever on board, having been ordered to Halifax on account of the fever breaking out among the crew. There had been nineteen cases on board at one time, and one of the victims died at Port Royal and was buried there. All the others had recovered except five.

SICK CATTLE.—Six thousand cattle suffering from disease were held in quarantine in pasture

at Newton, Kansas, August 27th. They were dying off rapidly, and a controversy had arisen as to the nature of their malady. It is feared that the late rains filling the streams which run through the pasture occupied by the quarantined cattle will convey germs of the disease to herds grazing in fields down the stream.

THERE was a great similarity in the manner of death of the late John Boyle O'Reilly and his compatriot, the late Charles G. Halpine, better known as "Miles O'Reilly." The latter died in 1868, from an overdose of chloroform taken to alleviate pain and induce sleep. Mr. O'Reilly died from an overdose of chloral. And Dante Rossetti died from an overdose of the same drug.

AN UNPROFITABLE FIELD FOR THE PATENT MEDICINE MANUFACTURER.—There is a law in Bulgaria to the effect that if a patent medicine, which is advertised to cure a certain malady, fails to do so, the vendor of the remedy is liable for damages, and may also be sent to prison for a limited period of time as a punishment for publishing an untruth to the injury of the public.

IN New York the Street Cleaning Commissioner has invited the President of the Board of Health to make a joint examination of the several systems for the cremation of garbage now used in European cities, and it is not improbable that some such plan for disposing of waste and refuse may be adopted.

THE Assistant Secretary of the Treasury has sustained an appeal from the decision of the Collector at Boston assessing duty at the rate of twenty-five per cent *ad valorem* as a medicinal preparation on a certain malt extract, holding that the article is not in any sense a medicinal preparation, but a food product.

ESMARCH states his belief that the proximity of cemeteries and drainage water from them have no influence in the spread of epidemics or contagious diseases.

EDINBURGH has 236,000 inhabitants, of whom 103,095 receive medical charity. The Scot is certainly canny.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., OCTOBER 11, 1890.

No. 8.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

THE PREVENTION AND TREATMENT OF TYPHOID FEVER.*

BY J. W. IRWIN, M. D.

It may be venturesome on my part to say any thing on the prevention and treatment of typhoid fever, in view of the numerous elaborate essays which from time to time have been contributed to this subject by members of this Society and other eminent observers; but, as the therapy of the disease is still a subject for inquiry, the few remarks which I have to make may need no further apology.

Bearing in mind the pathological features of typhoid fever, we can enter upon its treatment only with dubious feelings, lest medicinal agents should hinder rather than favor the powers of nature to effect a cure.

We dread the approach of cholera, of small-pox, of yellow fever, and other contagious or epidemic diseases, whether transmitted by contagion or infection, and we fortify ourselves against such pestilences, but never do we place a similar obstruction in the way of typhoid fever, which brings much suffering and death to our homes. Nor is it an easy task to do so, for, like the poor, it is "always with us."

Disinfectants have been made use of to prevent the extension of the disease, but rigid quarantine has not been instituted against it. When the first case of typhoid fever is observed in any community proper precautions are not

taken to prevent the diffusion of the disease. On the contrary, visitors to the sick are allowed to come and go. By this means the disease slowly but surely spreads and multiplies its victims.

This want of dread of the disease on the part of the public comes from the general impression that typhoid fever is not contagious, a view which is held by the majority of physicians, and which obtains its strongest support from the facts that the fever does not attack all the members of a family at the same time, or during the prevalence of the same epidemic, nor all persons of a susceptible age who have been exposed to it. When we come to study the habit of the disease this argument loses force. No one dissents from the view that typhoid fever is a disease which pre-eminently attacks persons in the bloom of youth, between the ages of fifteen and thirty-five, and hence its subjects are somewhat limited. Even in these cases it is believed that a certain condition of the system must exist before the seeds of the disease will take root—a condition which has not been described nor determined before invasion by the microbe. The atmospheric transmission of the seeds of typhoid fever is becoming much more apparent, though water, milk, and other alimentary substances are still regarded as the greater mediums of infection.

We hear of the fever germs having been discovered in the emanations from sewers and cess-pools, and often wonder, as the germs of typhoid fever are said to enter the system by the stomach, what part sewer gas takes in causing the disease. Whether or not fever germs can live in sulphureted hydrogen gas is not sufficiently clear.

When a case of typhoid fever occurs in any community prompt measures should be taken to confine the poison of the disease to as narrow

* Read before the Louisville Medico-Chirurgical Society, September 19, 1890. For discussion see p. 231.

limits as possible. The occupants of the house in which there is a case of typhoid fever, who have access to the sick-room, or who mingle with the nurses of the sick, should not, without suitable disinfection, be allowed to intermingle with persons who have not been exposed to the disease. Physicians and nurses in attendance on the sick should be required to take suitable precautions to prevent their spreading the disease. Friends and neighbors should be prohibited from visiting typhoid fever patients. All clothing made use of in the sick-room or about those in attendance on the sick should be thoroughly disinfected before being brought in contact or washed with the garments of well people. The excrements from the body of the patient should be rendered harmless by the proper use of disinfectants. The vessels used about the bed should be kept clean and free from the seeds of the disease.

For the purpose of carrying out the foregoing measures, and any other rules and regulations which may become necessary by reason of this or any other contagious or infectious disease, sanitary police should be appointed by the General Government. The police should be physicians especially educated in chemistry, microscopv, and sanitary science. They should receive sufficient remuneration for their services to enable them to live without engaging in the practice of medicine or in any other profession or occupation. The police should have full control of all sanitary affairs, and have the power to restrain and control offenders and violators of such rules and regulations as a wise experience may have caused to be established for the protection of the public health against all contagious and infectious diseases.

Rules and regulations such as govern the appointment and promotion of the medical faculty of the Marine Hospital Service should be applied to the appointment and promotion of the sanitary police.

When a patient has typhoid fever he is early put to bed, and rest of body and mind enjoined. The sick-room is kept well ventilated and lighted, and the temperature maintained at from 65° to 70° F.

The patient's diet is regulated to suit his powers of digestion, which during the first week of

the disease is usually bad. Sweet milk, butter-milk, arrow-root gruel, and broths compose his food. He is fed at regular intervals of three hours during the day and four hours during the night. From six to eight ounces of milk is given every third or fourth hour at first, occasionally substituting from four to six ounces of arrow-root gruel, or broth without vegetables. Should the food appear in the stools undigested the quantity prescribed is lessened, but should there be evidences of good digestion the amount of food is carefully increased. Where food is taken with some relish and fairly well digested by the patient, two quarts of milk and one quart of arrow root gruel or broth constitute his daily allowance. I have sometimes given pepsin after food, and thought it aided digestion, but milk peptonized outside of the body has never proved useful in my cases.

We now come to consider the medical treatment of typhoid fever, and we find that there is no remedy that will shorten the course of the disease, and none that will aid the powers of nature to effect a cure in an uncomplicated case. Therefore I do not give medicines in such cases. To relieve the fever, sponging the body with equal parts of tepid water and alcohol, or alcohol alone, proves grateful to the patient and often causes refreshing sleep. When the temperature exceeds 102° F. the patient is sponged, but should the temperature reach 105° or 106° F. the internal use of whisky or brandy and small doses of opium in addition to the sponge bath have proved to be of much value in sustaining the powers of nature against the debilitating effect of increased heat. A high temperature in all uncomplicated cases is not a bad indication. On the contrary, the recovery in such cases is often the most complete. As a general rule, a high temperature does not last long at a time. Often after remaining high for two or three hours it will fall two or three degrees without the aid of any remedy. Should the patient become sleepless there is no drug equal to opium for relief, as it not only causes sleep, but it is also an excellent heart tonic. Where opium does not agree with the patient codeine paraldehyde or urethan have given relief.

The most serious complication of typhoid fe-

ver is excessive diarrhea, and this trouble I have found to be oftener due to the use of too much food than to all other combined causes. In such cases the amount of food which the patient is to receive is regulated to that which will digest, or for a time it is suspended. There is no remedy that will relieve the diarrhea equal to opium. This drug I have found most useful in controlling bowel movements, as well as sustaining the enfeebled heart. As soon as any sign of heart failure can be discovered four to six ounces of whisky or brandy are given in divided doses daily. Oxygen gas is another valuable heart tonic, which may be given by inhalation to the extent of from ten to twenty gallons every third hour. Atropia injected hypodermically is also a good heart tonic in doses of $\frac{1}{100}$ of a grain every six or eight hours. Hemorrhage and perforation of the bowels and peritonitis I have not often seen in private practice, but where I have seen such complications opium or its alkaloid have proved to be most useful when given in repeated doses enough to control pain and peristalsis.

I am of the opinion that there is no other remedy worthy of confidence in controlling these often dangerous complications. Nephritis is best relieved by the local use of poultices composed of one part of ground mustard and seven parts of flaxseed meal, and for the relief of pain opium given internally is the most useful remedy.

Turpentine on flannel clothes applied to the abdomen has relieved tenderness and tympanites, but the internal use of opium three times daily I have found to be the surest remedy for relief.

Bronchitis and pneumonitis occurring as complications of typhoid fever do not yield to any form of special medication. Food and stimulants have done the most good. Quinine in tonic doses has been prescribed with apparent benefit in such cases. Opium in some form is the best remedy to relieve cough and pain and make respiration easy.

Retention of urine in all cases that I have seen have been relieved by the aid of the catheter only.

Finally, I do not give laxatives or cathartics at any stage of the disease for their favorable

influence on the course of the fever. I give such remedies only where constipation is very great, or where there is reason to suspect the presence of undigested food in the alimentary canal which is causing irritation. In such events castor oil or compound licorice powder usually serve the purpose. Sometimes these remedies have to be supplemented by enemata of turpentine and soap water. Cathartics weaken the patient and often cause diarrhea by their irritating effect on the inflamed intestinal mucous membrane. The evacuant plan of treatment does no good. On the contrary, it does harm. In cases where the most diarrhea occurs, delirium and general prostration are most marked.

It can not be truthfully said that there is any method of treatment with the view of getting rid of the poison of the disease, either by the use of laxatives or cathartics, which improves the condition of the patient.

SUMMARY.

1. There is no medical treatment for an uncomplicated case of typhoid fever.

2. Diet and stimulants carefully regulated to suit the case, and good nursing, fulfill all the indications.

3. The fever is best controlled by frequent sponge baths of tepid water and alcohol, and the internal use of stimulants and opium.

4. Feeble heart and prostration from hemorrhage or diarrhea are relieved by opium, stimulants, belladonna, and oxygen gas.

5. Pneumonitis and bronchitis are not influenced by special medication. Food and stimulants, with opium to relieve cough and pain, and quinine in tonic doses may be given.

6. Hemorrhage of the bowels requires the free internal use of opium only.

7. Perforation of the bowels is only successfully treated by the use of opium.

8. Peritonitis requires the use of opium in repeated doses.

9. Tympanites is most successfully relieved by the use of opium internally three or four times daily, with turpentine applied to the abdomen.

10. Diarrhea is controlled by opium and the regulation of food.

11. Insomnia yields best to the use of opium ; where this drug is not well borne codeine paraldehyde or urethan may be given.

12. Nephritis should be poulticed locally and opium given internally to relieve pain.

13. Constipation is best relieved by mild laxatives and enemata.

Retention of urine requires the use of the catheter only.

LOUISVILLE.

SURGERY OF THE HAND—WITH REPORT OF A CASE.

BY HENRY E. TULEY, M.D.

In manufacturing towns many cases of injuries to the hand are presented to the surgeon, who, in the attempt to secure a more or less useful member, finds his skill and his patience taxed to the utmost.

The hand is frequently the subject of crushes and laceration. This is due to the fact that artisans constantly work with sharp tools, and that in adjusting and operating machinery it is the hand that is most exposed to danger.

Both bones and soft parts are frequently involved, often requiring the removal of the whole member ; but in all such injuries the surgeon should be conservative, employing great ingenuity in the performance of the operation, the extent of the injury determining the amount to be removed.

The saving of a joint is often of paramount importance to the patient, and in the great majority of cases primary amputation should not be done. All cutting operations should be deferred until it becomes plainly evident how much should be removed, and by waiting oftentimes it is shown that an operation is not at all necessary.

These injuries are generally able to be sent to the office, where they should be cleansed with bichloride solution preparatory to an examination of the member. If called to the factory, previously prepared water should be taken with the dressings. It can be conveniently carried in the bag-pipe irrigator, devised by Dr. Ap Morgan Vance, of this city.

It is seldom that one finds it necessary to use sutures in wounds of the fingers to obtain

coaptation of the parts, better results being got by a small gauze roller prepared from hygroscopic excelsior butler cloth, rendered antiseptic by immersion in a 1 to 3,000 bichloride solution. This (a yard wide) is folded three times, each time in half, and put immediately in hermetically sealed jars. From this, as needed, it can be drawn, and by simply cutting across its folded end, according to the width required, a bandage is secured by which the parts can be molded, as it were, into shape. This bandage, owing to the unevenness of its edges and thinness of material, can be made to conform readily to the inequalities of the member, distributing its pressure equably, not necessitating the laborious application of the reverse turns. In injuries as made by circular saws, in which every thing is severed, but one side of a finger and its digital artery remaining, this primary dressing may be allowed to remain—saturated as it soon becomes with blood, as long as it is perfectly aseptic—sometimes for ten days or two weeks. The dressing in the region corresponding to the wound can be removed layer by layer at will and a new dressing applied, but the rest of it should be left to act as a splint—at first reinforced by a heavier one of leather.

Often when joints have been entered or tendons injured this dressing becomes saturated with a pearly white material, which quickly hardens, forming a tenacious, gluey covering to the wound. This causes considerable pain from the pent up discharges no longer able to penetrate the impermeable coating. By immersing the member in hot boiled water or hot (1 to 100) carbolyzed solution the pain is quickly relieved, since this renders the dressing more absorbent and relieves the pent up discharges in the wound.

Lacerated wounds, in which a large amount of skin has been destroyed, should be left to granulate, at each dressing covering the parts with iodoform, preferably the crystalline variety.

In some injuries of the fingers the whole or part of a phalanx may be exposed by the tearing of the muscle from it. By careful separation of the tissues and periosteum remaining to a point above the end of the lacerated muscle, the bone being readily cut with pliers and the tissues molded over its end and left to

build up, a good piece of the finger can be saved. General anesthetics are rarely needed. If necessary local anesthesia can be produced by ether spray or cocaine.

I will briefly report a case illustrative of conservative surgery applied to the hand.

George B., aged fifteen, while engaged at his daily occupation at a cooper shop, was hit upon the head with the butt end of a whip, and, stumbling, fell forward upon a circular saw with each hand. The little finger of the right hand was cut off at the metacarpo-phalangeal articulation; there was a compound comminuted fracture of the first and second phalanges of the ring finger, with extensive laceration of its little finger border, so that amputation of it was necessary. The patient was anesthetized, the right hand cleansed, sutured, and dressed. Upon examination of the left hand a lacerated wound was found on the anterior aspect of the wrist, extending from about two inches above the lower end of the ulna to the lower end of the radius, tearing out a triangular piece of skin and muscle at the lower end of this cut. Every thing was severed through to the bone. Both radial and ulnar vessels, flexor tendons and nerves, with the probable exception of the radial, and the periosteum were rasped. The hand was lying back upon the dorsum of the fore arm in hyper-extension, the lacerated ends of tendons protruding through the gaping wound. The patient was in considerable shock, and a great deal of blood had been lost. The outlook for the saving of the hand was not good, and amputation seemed clearly indicated; but upon the removal of all clots, both the proximal and distal ends of the radial and ulnar vessels were found to be bleeding. This demonstrated the maintenance of collateral circulation, and conservatism was decided upon. The hand was brought in as nearly normal a position as possible, the bleeding vessels ligated and an effort at uniting the severed tendons made. Commencing at the inner aspect of the wrist the jagged ends were trimmed and a continuous suture of catgut introduced. As near as possible each severed end was united to its fellow, the ends of the flexor profundis digitorum were united *en masse*, as the laceration occurred above its division. All the ends of the

flexor sublimis digitorum could not be found, as they were retracted in their sheaths beyond reach. The flexor longus pollicis was not united, as its distal end was too much lacerated to admit of suturing. Those ends remaining unsutured were left, as I hoped to obtain union of them to the cicatrix. A lacerated mass at the base of the thumb was removed, probably containing the distal end of the severed median nerve, as it could not be found. The wound was then closed as far as the tension would permit, the catgut sutures being introduced at its inner end; the rest was dressed openly, so much tissue being lost. Iodoform bichloride gauze dressing was then applied and a splint of leather put on confining the hand in semi-flexion. On the second day the boy was using his right hand in feeding himself, and at the end of two weeks all dressings were removed from this member.

The wound of the left wrist healed by granulation, being somewhat retarded by the sloughing of a tendon exposed.

At the present writing, three months since receipt of injury, there is considerable voluntary motion, and with each effort of flexion the irregular cicatrix can be seen to move. During the process of healing there was hyperesthesia of the fingers; now sensation is lost below the web of the fingers, save on the dorsum, where it is present, though modified, in the region supplied by the radial nerve. As a proof of the lack of sensation he—"to see if he could feel"—stuck his hand into a tub of hot slop, raising blisters of considerable size on his fingers, without having any sense of pain. Voluntary motion is gradually increasing. He can now approximate the thumb and index finger, and the outlook in the case is very favorable for a useful hand.

LOUISVILLE.

CAMPOR A SOLVENT FOR IODOFORM.—Camphor increases the solubility of iodoform in alcohol and ether. While one hundred parts of alcohol ordinarily dissolve not more than one and one fourth parts of iodoform, the same amount of a saturated solution of camphor is capable of taking up as much as ten parts.

Societies.

RICHMOND (VA.) ACADEMY OF MEDICINE AND SURGERY.

September 23, 1890, Dr. W. W. Parker, President,
in the chair.

Dr. John N. Upshur, Professor of Materia Medica and Therapeutics in the Medical College of Virginia, honorary member of the Medical Society of West Virginia, etc., the appointed leader, read the following paper: Placental Disease as a Cause of Premature Labor.

The sparse literature on placental pathology makes a discussion of the lesions of this viscous one of no little difficulty, and it is only by clinical observation and legitimate deductions from such clinical facts that we can arrive at conclusions of a practical nature, these being proved only by the successful issue of treatment founded at best upon theory suggested by these clinical facts.

Reflections on this subject were suggested to the writer by a case which is made the text of this article, and which was one of great interest and concern to him. The welfare of whole family connections, based upon pecuniary considerations or the domestic happiness which often centers in fruitful issue, can not be overestimated.

CASE. I was called to see Mrs. X, August 5, 1888, in her third pregnancy, advanced to the fourth month, aged twenty-nine, blonde, health always robust. She had lost two children at the beginning of the seventh month, attended by one of the leading physicians of this city. Careful inquiry failed to elicit the history of any imprudence on her part—a jar, a fall, or any tangible cause for the premature labor. The history of both the first and second pregnancy was identical with the third. There was no swelling of hands or feet, no headache, and careful analysis failed to disclose the presence of albumen in the urine or any functional derangement of any organ whatever.

She was enjoined to be as quiet as possible, and avoid going up and down steps, to keep early hours, and given tincture of the chloride of iron and uterine sedatives, and watched most carefully and anxiously. Soon after entering

the sixth month the movements of the child became each day more feeble and irregular, and she began to complain of a weight in the hypogastrium; motions of fetus ceased and labor came on. Labor easy and rapid; fetus cried feebly once or twice; presented a swollen appearance with more or less sclerotic condition of skin; cord empty of blood; placenta firmly adherent, requiring nearly three fourths of an hour to remove it; uterus contracted well and firmly. The placenta was very soft, pale, and anemic—so soft as to drop to pieces by its own weight, or a portion of it.

Patient became again pregnant early in January, 1889. Carefully reflecting on the condition of the placenta and the history of the two previous pregnancies and deliveries, I concluded that the cause of the death of fetus and premature delivery was a latent endometritis, stimulated to active progress by pregnancy and the implantation and development of the placenta, the inflammatory condition extending to the placenta, producing fatty change, cutting off the circulation of the fetus, and consequent death so soon as the pathological change had progressed far enough. All history of syphilis could be absolutely eliminated, because both parents were exceedingly anxious for issue, and I am confident that I elicited from the husband the whole truth as to the history of his sexual life. He had once had a mild gonorrhea previous to marriage. Suspicion here, you say, of urethral chancre; but if so, why did he not have bubo and secondary symptoms at the time and tertiary symptoms succeeding? none of which he has ever had, nor has he ever had any syphilitic treatment. The woman herself is absolutely above reproach. So soon as I was informed of the occurrence of pregnancy for the fourth time, I put the patient upon the most active alterative treatment of the bichloride of mercury, red iodide, and chloride of gold and sodium, varying these alteratives, and keeping up the treatment for six months. Patient also drank lithia water freely.

I desire in this connection to especially commend the chloride of gold and sodium as an alterative; its action in the dose of $\frac{1}{8}$ of a grain to $\frac{1}{2}$ grain in combination with extract of one of the bitter tonics is, in many respects, similar

to that of the iodide of potassium, but I believe it has a special influence in modifying inflammatory conditions of the endometrium, and in my hands has certainly been productive of very great benefit.

The patient progressed beyond the usual danger point and was delivered safely at term; labor easy and rapid; child a magnificent specimen, and free from every blemish—is now more than a year old, and has been singularly exempt from the usual infantile maladies. The placenta was healthy.

Remarks. Galobin speaks (p. 298) of inflammation of the decidua which may arise from previous endometritis existing prior to conception, and it may exist in the vera, or reflexa, or serotina. He says a study of inflammation in this situation is difficult because the cell proliferation of the decidua is analogous to that which takes place in the inflammatory process; it is the inflammatory process in the decidua serotina which chiefly affects the placenta. Symptoms of this trouble are soreness and tenderness over the uterine globe, but these may be entirely absent. The same author above quoted says that fatty degeneration may be partial, and then the fetus may be born alive, but that "*extensive it may directly kill the fetus by cutting off the supply of blood*" Parvin (*Science of Obstetrics*, p. 275) speaks of the distinction made by Dr. R. Barnes between fatty degeneration and fatty metamorphosis; "the former begins in the living, the latter is found in the dead tissues." In Cazeaux and Farnier (p. 551) is found the expression of doubt as to the ability to fix the symptomatology of this lesion, there being only evidence of uterine congestion manifested in some cases by weight in lower part of abdomen, pain in loins and down the thighs. But these symptoms may be present when other placental lesions exist. There may be apoplexy, sclerosis, syphilitic disease, cancer, etc. It is not pertinent to the subject under discussion to consider these, nor will time or space permit. I have been led to consider the subject from its present standpoint because of the success attending the treatment of repeated premature delivery based upon the theory enunciated, and because in the light of such success it may point the solution to some case of similar difficulty.

Supplementary to his paper, and in reply to questions, Dr. Upshur called attention to Galobin's opinion that a peculiar pinkish color of, and the presence of watery gummata in the placenta was evidence of syphilitic disease of that organ. But he is satisfied of the absence of any syphilitic taint in the case reported. The success of the alterative treatment might also suggest syphilis. But he has seen decided improvement in simple endometritis from the exhibition of the chloride of gold and sodium. He ascribes the good results in the above case principally to the use of that salt. The general health of the patient was good.

Dr. Hugh M. Taylor was reminded of a patient who lost her first three children about the eighth month; in all of these pregnancies preventive treatment was adopted. Subsequently she had three children, no preventive treatment was attempted, and all of the last three children were born alive, strong, and robust. Thinks we sometimes credit medicine with alterative influence which it does not deserve.

Dr. Thos. P. Moore does not think that conception can take place in a uterus which at time of connection is the subject of corporeal endometritis. The leucorrhea consequent upon such diseased condition effectually impairs the vitality of the spermatozoa, or by its flow washes the ovum from the uterine cavity. But even if conception takes place it is impossible for gestation to safely progress, and abortion or miscarriage results. Where conception takes place in a healthy uterus and endometritis subsequently occurs, the pathological changes consequent upon inflammation of the endometrium preclude the possibility of a continuation of pregnancy to term. Where the neck only is involved, conception and delivery at term may occur, but when both neck and body are diseased non-conception is the rule. Placental disease proper is frequently secondary; various morbid conditions of the blood bring about abortion, such as the continued and the eruptive fevers and syphilis, especially secondary. In tertiary syphilis the patient frequently goes to term. Congestions and other interferences with the circulation occasioned by flexions or versions produce fatty or amyloid degeneration, or general uterine contractions sufficient to de-

tach the membranes—retroflexions especially fruitful in these bad results.

Dr. Upshur does not think that the failure to abort, in the case of his patient, can be ascribed to coincidence, as suggested by Dr. Taylor. He referred to other cases of non-pregnant endometritis in his practice that were benefited by this treatment. A case yielding to iodide of potassium or bichloride of mercury does not necessarily imply syphilitic taint. It is not common for conception to take place where there is an existing endometritis, especially of the cervix. But where you have latent endometritis before marriage it may be developed by pregnancy. This patient had a dysmenorrhea before marriage, but was not treated for it, as conception took place so quickly he did not have the opportunity.

REPORTS OF CASES.

Dr. Upshur had been recently called to see a lady of usually robust health. He found her with decided trismus, spasmodic contraction of flexor and extensor muscles of hands and of lower extremities. Spasms both violent and painful, lasting several minutes, and excited by slight draft or current of air. There was no wound to give origin to suspicion of traumatic tetanus, and no probability of her having obtained strychnine. But it seems she had eaten a few raw oysters the day before, the weather being warm. The convulsions were accompanied by choleraic symptoms, nausea, vomiting, and purging, but no collapse. Administered sulphate of morphia hypodermically and chloroform by inhalation, and further controlled the convulsions by twenty-grain doses of bromide of potassium every two hours. Is satisfied the convulsions were due to eating unsound oysters.

Dr. W. W. Parker reported a case of convulsions in a mulatto child whom he had relieved of an attack of nausea one month before by the use of carbolic acid. There were three or four convulsions daily, accompanied by a profuse flow of saliva. Suspecting worms, a vermifuge was administered with negative result. He then gave an emetic of sulphate of zinc without relief. The fourth day was present during convulsions, which were confined to the

upper portion of body and upper extremities. Thinks them due to ingestion of some insoluble substance. Was rubbed along the spine with croton oil last night; better this morning.

Dr. Hoge thiinks the convulsions due to some preputial trouble.

Dr. Ed. T. Baker reported a case of angina pectoris, supposed to be caused by depressed fracture of skull. "Last Wednesday," said the Dr., "I was called to see a white man, aged thirty, height 6 feet 2 inches, weight 205 pounds, very muscular, occupation striker in a blacksmith's shop. Prior to 1884 (when he received the injury to his head) he had not seen a day's sickness in his life. This injury left him with a depression on the left side of his head on a level with the top of and one inch posterior to the margin of ear, and one and one fourth inches from tip of mastoid process. The depression measures one inch from upper to lower margin, and one and one half inch from anterior to posterior margins. Was confined to his bed for eight months after receipt of injury. After he was able to go about he had an attack of angina pectoris, and has had as many as three a week since that time. Sometimes he will not have one for a month, when they return with increased severity. Has been treated by a number of physicians without relief. He notices that he has had more attacks and they have been much more severe in character since he had *la grippe* last March. A stethoscopic examination of his heart revealed the sounds normal, but a little weaker than seemed in keeping with his fine physique and general strength. He has some dyspeptic symptoms, for which elix. lactopeptivae was prescribed.

"My objects in reporting this case are (1) to get the opinion of the older members of the academy in regard to the advisability of using nitrite of amyl in this case, as the patient notices that when he gets very warm, and especially when he lowers his head in stooping, that it gives him pain in the back of his head just above neck, and will become unconscious unless the upright position is immediately resumed. As amyl produces about the same effect—vertigo, dizziness, and flushing of the face; in other words, temporary hyperemia—is it not advisable to use it, and thus substitute

unconsciousness due to congestion of brain for angina pectoris? (2) Can we attribute the angina pectoris to the blow on the head, which may have fractured the inner table of the skull, and by irritation of that portion of brain so interfered with the action of the pneumogastric nerves as to cause the heart trouble? (3) Could he not be operated on and the depressed bone raised from the brain, and thus relieve both conditions?" He says that he has been repeatedly told by physicians that the wound is too low down to be operated on. Is now taking sodium bromide, compound spirits ether, and aromatic spirits ammonia three times daily, and every two hours when threatened with attack.

Dr. B. further said that the attacks were not more frequent in the recumbent position or at night. Mind clear. Thinks there is chronic congestion or inflammation about brain.

Dr. Parker thinks it a clear case for an operation.

Dr. Upshur saw a case that, in regard to the epilepsy, was similar to that of Dr. B. The skin over temple was cut by a falling timber. No ascertainable depression. Epileptic attacks, two or more daily, soon followed, dulling mental action. Was trephined, and upon inner table of button of bone removed appeared a deposit of callous, indicating that there had been fracture. No convulsions for weeks succeeding operation, but at end of that time he fell forward on face, dead. Another case was that of an inmate of Central Lunatic Asylum; was struck on head with ax in 1862, and a piece of bone driven on brain; became violently insane, but had no epileptic convulsions. Was trephined by Dr. Hunter McGuire in 1869; perfectly rational upon recovery from operation, and took up the thread of events from the time he was struck, the intervening period being a blank; subsequently he died of cerebritis.

Dr. Hugh M. Taylor had recently a case somewhat similar to that cited by Dr. Baker. A railroad employe received injury in same region, remaining unconscious for thirty-six hours thereafter, when mind cleared. No fracture of skull was diagnosed; suffered pain over frontal region, left eye blood-shot and protruded; evidently some cerebral lesion. Continued this way for two or three weeks. In six weeks be-

gan suffering from vertigo, increased pain, and depression of cerebral functions amounting almost to coma. This was followed by discharge of pus from ear; "Cheyne-Stokes" respiration. Diagnosed abscess of brain, probably due to depression. After consultation with Dr. C. W. P. Brock, decided to trephine, but patient died night before day selected for operation. Is satisfied he should have trephined.

Another case of abscess of the brain was reported by Dr. M. D. Hoge, jr. Two weeks ago he saw, in consultation, a workman with suspicious history of previous syphilis. Had been semi-comatose for two days; abscess of the skin on right frontal eminence; left leg paralyzed; bowels and bladder under complete control; respiration accelerated; pulse very quick and small; temperature 104° F. On account of feeble and uncertain condition of heart it was decided not to trephine. Put upon dram doses of potassium iodide every four hours. Sixteen hours later he died, paralysis having rapidly extended to all four extremities. Skull was trephined at *post-mortem* at point selected in discussing operation the day before; dura mater pale and thickened, a smoothly-lined pus cavity lying beneath of the size and shape of a guinea-fowl's egg, and occupying right frontal lobe, and filled with thin, offensive fluid. There was no apparent communication between external abscess and interior of cranium.

Dr. Hugh M. Taylor thinks the cerebral abscess may have been secondary, as sub-pericranial suppuration may find its way into the skull by extension along the venous sinuses leading into the cranium. A cerebral abscess not infrequently occurs as a result of phlebitis of the diploic veins.

Dr. W. W. Parker, in calling attention to the occurrence of serious brain trouble without significant symptoms, spoke of a patient who suffered for some days with frontal headache, and then fell suddenly dead. *Post-mortem* revealed an ounce of pus just back of frontal sinus. Cerebral abscess frequently cause of death in children. Saw a child with bluish boils about neck, which he opened. Was surprised to hear of death from convulsions next day. *Post-mortem* showed extensive softening of brain, which had evidently been diseased for 8*

some time. Another case was that of a ten-year-old boy whose head was fractured by a wagon wheel passing over it, death occurring several weeks subsequently. Mind clear to within a few hours of death. *Post-mortem* showed disorganization of whole top of brain. Query: Where is the seat of intelligence?

The Dr. next spoke of several cases of atypical typhoid fever that have recently come under his observation, in which there was no heat of skin, no furred tongue, and no loss of appetite for fluids, attended with emaciation and prostration. One terminated in fifteen, another in thirty days. In treating typhoid fever, the points to be guarded are the brain, lungs, and bowels. Give an abundance of good milk and toddy. Gave a girl one quart of whisky every day for six weeks. Thinks it greatly reduces temperature. For the diarrhea he gives a mixture of turpentine, kino, paregoric, and bismuth.

Dr. I. W. Henson reported a case of fever which he was unable to classify. There were at first griping pains over the abdomen, which was somewhat distended, but later no pain or tenderness. The fever ran a regular course of morning remission and evening exacerbation. Morning temperature from 99° F. to 99° and a fraction, evening from 100° F. to 100° and a fraction; occasionally entire absence of fever for days; pulse rapid and weak; suffering greatly at times from cardiac weakness and a sense of impending death, requiring active stimulation. Slight delirium at times, suspected lung troubles, but physical examination gave no evidence thereof. Treated at first by mercurial purgatives, followed by quinine, with a tonic of iron and arsenic and dilute nitro-hydrochloric acid; milk diet, and, later, whisky in frequently repeated doses. Fattened while in bed. Suspecting local influence as a cause, sent her to the country for the month of June. Menstruated regularly till beginning of sickness, when she missed one or two periods; no evidence of scrofula; was first taken sick last December, and still has fever, but is otherwise apparently well.

Dr. W. S. Gordon had recently been consulted by a lady just from a malarial district, where she had been nursing a typhoid patient. Had

fever, and had been taking large doses of quinine. In each week she would have fever for four days and be free from it the succeeding three. Examination of lungs discovered slight subcrepitant râle at apex of right lung; no cough; patient emaciated; no history of previous pneumonia; put on creosote and whisky; improvement. Sent her to the country, and on return she still has slight fever.

Dr. Parker is satisfied that phthisis may exist in its earlier stages when there is no cough and no evidence of its presence is furnished by physical signs, and thinks Dr. Henson's patient has consumption.

DR. JAMES N. ELLIS,

Reporter.

LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.

Stated meeting, September 19, 1890. A. M. Cartledge, M. D., President, in the chair.

The essay of the evening was read by Dr. J. W. Irwin; subject, "Prevention and Treatment of Typhoid Fever." (See p. 225.)

DISCUSSION.

Dr. John G. Cecil said: I concur in the position taken by the essayist that there is no drug or line of treatment that can be said to shorten the course of the disease. In reference to the reduction of temperature, while the author holds the application of water in just esteem, I think there are cases in which the chemical antipyretics may be advantageously employed. In my hands antifebrine has often acted pleasantly and efficiently. In reference to the treatment of perforation, while opium is to-day the only remedy that promises any thing in the way of relief, it is not improbable that the surgery of the future will deal with this formidable incident of the disease.

Dr. D. T. Smith: It seems to me that we ought to agree upon some definite treatment in this disease. Typhoid fever, pure and simple, is best managed without drugs. Of course in many cases symptoms will arise which must be met by rational therapeutic measures.

In the matter of prevention I think the author's scheme impracticable. It is quite im-

possible to get the family of a patient to carry out properly methods of disinfection ordered by the physician. If the sanitarians ever realized their dream of stamping out the disease, their measures to the purpose must be carried out under the direction of a medical police. Absolute cleanliness, the immediate removal of excreta, and the proper disinfection of the clothing about the patient are essential to success. Right here I would like to enter protest against the coal tar derivatives in the treatment of any disease, and I think the day is not far distant when they will have no interest above that of chemical curiosities. Water in the reduction of temperature will effect any good that is attainable in this direction. When the kidneys are inactive it is generally a sufficient diuretic, though at times some diuretic drug may be effectively employed.

In the proposed laparotomy by Dr. Cecil I can see nothing but a device for effecting the quick transit of the patient over Jordan.

Such symptoms as can not be met with diet, rest, opium, water, and a few like simple measures, I take it will never be held in check.

Dr. F. C. Wilson: The disposal of the excreta is the most important prophylactic consideration relative to typhoid, since the disease would seem to be propagated through the medium of the feces. It is my habit to carefully avoid the throwing of the patient's stools into the vault or water closet. It is best to have them put into a pit dug for the purpose.

In my opinion the essayist neglected to dwell sufficiently upon the complications of the disease. Prominent among these is hemorrhage. It is recognized by a sudden fall in temperature, a thready pulse, and pallor. These symptoms often precede the appearance of blood in the stools. In this condition opium is the sheet anchor, while ice should be applied to the seat of ulceration, and turpentine given by mouth, and ergot or its alkaloid hypodermically. Stimulants in large doses must not be neglected here, and they must be kept up till their effect is visible.

Dr. H. Pusey said, in reference to second attacks of the disease, that he knew a man who had had typhoid fever four times. He believes that alcohol has a marked influence in reducing temperature.

Dr. T. L. McDermott: In reference to proposed laparotomy in perforation, I can not see how it could be effective. Patients with perforation decline with great rapidity, and most, if not all, would die under the surgeon's knife. I have, however, seen some patients with hemorrhage and in collapse who got well. The two most important points in the management of typhoid fever are, keep the patient at rest and avoid purgatives. Sometimes in insomnia I give a hypnotic, but as a rule I give no medicine beyond a little spirit of *mindererus* and some camphor water. I don't feel any more uneasiness about a case of typhoid than I do about a case of measles. In the course of either one serious complications may arise, but the majority of cases will pull through. In regard to prophylaxis, etiology, infection, etc., we have still much to learn.

Dr. H. A. Cottell said: It would seem that about the only interest attaching to the discussion of a subject so hackneyed as the treatment of typhoid fever is the difference of opinion among the doctors so discussing it. I am inclined to differ with the essayist in the use of the word contagion relative to typhoid fever. The terms contagion and infection are not to-day employed in the sense attributed to them by the elder Flint. He said a contagious disease was one transmitted by personal contact—for example, syphilis; while an infectious disease was one transmitted through some medium—the air, for instance; and he cited smallpox as an example of a disease that is both contagious and infectious. This was before the office of pathogenic microbes was understood. To-day we hold a disease to be contagious that transmits itself by personal contact, by inoculation, by forimities, or directly through the medium of the atmosphere. By an infectious disease we mean one whose specific microbes must pass from the first subject into a nidus, where they undergo proliferation or development before they can reproduce the disease in a second subject. According to this acceptance of the terms, typhoid fever is probably not contagious, but infectious. There is good warrant for the opinion to-day that typhoid fever is always transmitted by the feces of the patient (which contain the typhoid bacillus

by the million) having found entrance into the food, water, or milk consumed by the victim. If this be true, the disease is distinctly preventable. First, destroy, if possible, by heat, all feces of typhoid fever patients; but since this is not possible, advise all your families to boil all milk and water before drinking them, and to eat no uncooked food. If this suggestion were religiously carried out, typhoid fever would disappear from the face of the earth. As for medicines, I would say that water, opium, turpentine, digitalis, strychnine, and whisky in the hands of the skillful physician will effect all the good that can be effected in the disease. I commend the author's good judgment in omitting mention of the chemical antipyretics. They are not only worthless therapeutically, but have power to do great mischief in any asthenic affection.

Dr. M. Thum said that in the early stage of the disease he always gives a dose of calomel. In cases where cardiac weakness is apparent he uses camphor and whisky. He has little faith in the effectiveness of so-called prophylactic measures.

Dr. Turner Anderson said that he desired to be put on record as condemning *in toto* the exhibition of the chemical antipyretics (coal tar derivations, etc.) in typhoid fever. He does not give much opium, holding it in reserve for special indications. The digestive function should be conserved as far as possible. He is therefore very careful not to overfeed the patient. He regards turpentine as one of our best medicines in typhoid fever. He allows an abundance of water. He does not believe that calomel, iodine, or carbolic acid do any good in the fever. He gives as little medicine as possible.

Dr. Irwin, closing the discussion, said: In regard to the use of the chemical antipyretics I deem it useless to speak. That they are worthless in the treatment of typhoid fever, most clinicians will to-day agree. I believe the disease to be contagious, at least in the sense of portability, since nurses seem to carry it from family to family. Alcohol, I think, is valuable only in supporting a weak heart; but it does seem to exert a salutary effect upon the depleted nerve centers. Opium is our sheet

anchor. I give it in small doses. I don't believe in calomel here; if the bowels need moving, give some mild laxative or an enema. Absolute rest should be secured, if possible.

F. C. SIMPSON, M. D.,

Secretary.

Reviews and Bibliography.

A Text-Book of Obstetrics, including the Pathology and Therapeutics of the Puerperal State, designed for Practitioners and Students of Medicine. By Dr. F. WINCKEL, of the University of Munich. Translated from the first German edition with permission of the author, under the supervision of J. CLIFTON EDGAR, A. M., M. D. One hundred and ninety illustrations. 927 pp. Price, cloth, \$6.00; sheep, \$7.00. Philadelphia: P. Blakiston, Son & Co. 1890.

Possessed of vast experience, of great learning, and of every desired facility as he is, it was not to be expected that a text-book from the hands of Winckel would fall behind any work previously given to the world. In fullness it is certainly not surpassed, and in features that relate to style and arrangement, to a graphic and vivid presentation of the subject successful comparison with it can not be made in favor of any other work. Even in this regard it may be said of it that it will compare most favorably with any other translation from the German.

Unfavorable criticism of its teachings in the main seems impossible, and it remains only to point out some of the *dicta* of the author as regards certain points in regard to which the current teachings may be unsettled.

The author believes that fecundation, though mostly taking place in the uterus, may not only take place in the tubes, but also in the ovaries; in this respect differing from the very positive teachings of Lawson Tait.

The source of the liquor amnii he thinks to be mainly the maternal vessels, but that undoubtedly the skin and kidneys of the fetus, the placenta and umbilical cord, contribute to the liquor amnii. The amnion, indeed, seems to possess in some way the power of self-regulation as to the amount of this fluid it shall contain.

The signs of pregnancy are given more fully than we have anywhere else seen, though not presented with exceptional clearness.

The chapter on position of the child *in utero* is opened with the declaration that the position of the fetus in the uterus, and its causes, is a phenomenon that has caused physicians of all times and races a headache, and eloses a careful and able discussion of the matter by giving his conclusion that "the predominance of head presentations is due to the direction of the forces of the uterus, the greater size of the fundus uteri compared with the lower segment, the greater mobility of the child's head, the shape of the uterus and child, the one adapting itself to the other best in head presentations."

This leaves little to be accomplished by the motions of the child, which many hold to be the determining cause almost exclusively. By a settled law of physics the feet and legs of the child when kicked out must move in the line of least resistance; that is, they will always move toward the surface of the fluid in which they move, for movement in this direction is easier than the opposite. The legs then taking the direction of the fundus, which is nearly always the higher part, of necessity turn the head in the opposite direction, where it is held by the shape of the uterus and by the similar continued movements of the fetus. The child in a very simple way by the most natural movements swims head foremost down to the outlet. In all difference this is confidently offered as a good prescription for the headache suffered by physicians of all times and races, as asserted by the author. The chapter or small part of a chapter devoted to rotation is obscure and unsatisfactory to such a degree that the student who had no other source of knowledge would scarcely realize that such a thing occurs. Indeed, about all we can find is embraced in the following brief sentence: "The occiput glides forward above the spina ischii, because the latter opposes an obstacle to advancement in the backward direction; it also passes forward because there is more space there than between the spine and the side of the sacrum; furthermore, on account of the lesser resistance at that point; and lastly, because the inclined plane readily allows it to turn anteriorly."

After the experiments of Dubois with the fetus on the cadaver, showing that the spines have actually nothing to do with rotation, the wonder is that such lines could be penned by so eminent a master as Winckel. With many other examples, it goes to show that his eminence is that of the scientist and man of practical turn, and not that of the philosopher and the physicist.

We pass over many good things till we come to the treatment of the third stage of labor, and here we must halt and applaud. He declares that Credé borrowed from England and Ireland the method which bears his name, and introduced it into Germany. He furthermore shows that the method is as old as history, and to-day widely prevalent among uncivilized peoples. One apt quotation is made from the Chinese, advising women in such cases, the puerperal woman, not to be frightened, "for many die because they listen to midwives and allow them to lay hands upon them." And the author himself contends that "a force which has sufficed to bring forth a child to the light of day, in spite of the resistance offered by the pelvis, the soft parts, and the child itself, will be capable of ejecting the less resisting placenta without the help of our hands." Only in case of excessive hemorrhage, or if the action of the abdominal muscles is insufficient and the average stage of two hours has been exceeded, does he recommend the employment of a modification of Credé's method. And if the signs of the times are rightly read, no matter how widely prevalent the Credé method now is, the day is not far distant when it will be at least not more employed than is recommended by the author.

The treatment of eclampsia, which the author says he has brought into thorough systematic use in his clinics within the last ten years, is practically that which has been in use in Louisville among some of the best obstetricians for twenty years, viz., the eliminative, and for which the foundation was laid by Meadows in his excellent monograph. But while we use jalap and Rochelle salts or bitartrate of potash he uses aloes with colocynth as the hydrogogue. The actual paroxysm is treated with chloroform and chloral. He thinks the recommendation

for the premature operative termination of labor in such cases ought to be considered as obsolete, a position in which he will be sustained, as we believe, by the verdict of time.

In the citation of authorities one can not but smile when, after reading some great French work, he has temporarily forgotten that any but French authors have contributed any thing to this department of science, he now reads Winckel only to forget that France has done any thing. American authors, however, are not slighted, and of these Parvin seems to be the special favorite.

Hand-Book of Materia Medica, Pharmacy, and Therapeutics, including the Physiological Action of Drugs, the Special Therapeutics of Disease, Official and Extemporaneous Pharmacy, and Minute Directions for Prescription Writing. By SAMUEL O. L. POTTER, A. M., M. D. Second edition. Revised and enlarged. 766 pp. Price, cloth, \$4.00; leather, \$5.00. Philadelphia: P. Blakiston, Son & Co. 1890.

In the preparation of this hand-book Dr. Potter has struck upon a happy method of arrangement for his materials that appeals at once to the good judgment of his readers, and renders his book one of the most convenient for reference of the entire list of works in this line.

While not by any means as full as several of the larger works, it yet embraces all that is of value in the therapeutical action of drugs, so arranged that reference becomes a matter of the greatest ease. In addition to this, he has formulated definite directions for the framing of prescriptions, and gives also a great deal of information on the subject of pharmacy, thus fully equipping the practitioner for his work, it matters not how much he may have to cultivate self-reliance in his practice.

By far the best part of the book is the portion relating to therapeutics, where each disease is given in alphabetical order with the remedies appropriate for each. Perhaps the most distinguishing feature of the book is its adaptation for ready reference.

The author is already well known through his admirable contributions to Blakiston's Quiz Compend, and this crowning work has already met with extended favor.

D. T. S.

Railway Surgery. A Practical Work on the Special Department of Railway Surgery, for Railway Surgeons and Practitioners in the General Practice of Surgery. By C. B. STENEN, A. M., M. D., LL. D. With illustrations. 307 pp. Price. \$3.00. St. Louis: J. H. Chambers & Co. 1890.

It is obvious at a glance that, except in the perfecting of arrangements for promptly and speedily taking care of the injured, there are few material points of difference between railway surgery and the surgery of similar accidents in any other department. The author, therefore, quite appropriately announces that his work is also for practitioners in the general practice of surgery. In the various chapters he treats of the transportation of injured railway men, temporary treatment in railroad injuries, shock, anesthetics, lacerated wounds, fractures, amputations, hemorrhage, excision of joints and bones, concussion and compression of the brain, burns and scalds, color blindness, injuries to hands and feet, railway concussion of the spine, transfusion, aneurism, and the method of taking care of the sick on foreign railroads.

The tone of discussion of mooted points is elevated and fair, while the work contains much in the way of a record of illustration and of interesting facts. Of especial interest is the chapter on railway spine, and the conclusions bear the impress rather of an impartial judge than of one closely engaged in railway service.

D. T. S.

A Treatise on Headache and Neuralgia, including Spinal Irritation, and a Disquisition on Normal and Morbid Sleep. By J. Leonard Corning, A. M., M. D. With an appendix. Eye Strain, a cause of Headache, by David Webster, M. D. Illustrated. Second edition. 259 pp. Price, \$2.75. New York: E. B. Treat. London: H. K. Lewis. 1890.

The Throat and Nose and their Diseases, with one hundred and twenty illustrations in color, and two hundred and thirty five engravings, designed and executed by the author. By Lennox Browne, F. R. C. S. E., Senior Surgeon to the Central London Throat and Ear Hospital, Surgeon and Aural Surgeon to the Royal Academy of Musicians, etc. Third edition. Revised and enlarged. Svo, 716 pp. Philadelphia: Lea Brothers & Co. 1890.

Scheme of the Antiseptic Method of Wound Treatment. By Dr. Albert Hoffa, Privat Do-cent of Surgery in the University of Würzburg. Translated from the German, with additions, by special permission of the author, by Aug. Schachner, M. D., Ph. G., Louisville, Ky.

Railway Surgery. A practical work on the special department of Railway Surgery, for Railway Surgeons and Practitioners in the general practice of Surgery. By C. B. Stemen, A. M., M. D., LL.D., Professor of Surgery in Fort Wayne College of Medicine, etc. With numerous illustrations. 8vo, 315 pp. Price \$3.00. St. Louis, Mo: J. H. Chamberlain & Co. 1890.

A Treatise on Headache and Neuralgia, including Spinal Irritation, and a disquisition on Normal and Morbid Sleep. By J. Leonard Corning, A. M., M. D., Consultant in Nervous Diseases to St. Francis Hospital, etc. With an Appendix. Eye Strain, a Cause of Headache. By David Webster, M. D., Professor of Ophthalmology N. Y. Polyclinic. Illustrated. Second edition. 12mo, 259 pp. Price \$2.75. New York: E. B. Treat.

J. B. Lippincott Company announce in press an important work on "Regional Anatomy in its Relation to Medicine and Surgery." By George McClellan, M. D., Lecturer on Descriptive and Regional Anatomy at the Pennsylvania School of Anatomy, Professor of Anatomy at the Pennsylvania Academy of Fine Arts, member of the Association of American Anatomists, Academy of Natural Science, Academy Surgery, College of Physicians, etc., of Pennsylvania. With about one hundred full-page *fac simile* illustrations, reproduced from photographs, taken by the author, of his own dissections, expressly designed and prepared for this work, and colored by him after nature. To be complete in two volumes of about 250 pages each. Large quarto.

The object of the work is to convey a practical knowledge of regional anatomy of the entire body. The text to embrace, besides a clear description of the part in systematic order, the most recent and reliable information regarding anatomy in its medical and surgical relations. The illustrations are intended to verify the text and to bring before the reader the parts under consideration in as realistic a manner as possible. Volume I will be ready for publication about December 1st, and the second volume is expected to appear shortly thereafter. The work will be sold by subscription only; salesmen will begin an active canvass the coming October.

Correspondence.

LONDON LETTER.

[From our Special Correspondent.]

The cure for consumption which Professor Koch claims to have discovered is to be tried on several patients in a Berlin hospital. Hitherto the German doctor has only experimentalized on animals.

Attention has just been drawn to the fact that old decomposed blood stains, from which water will no longer dissolve out the coloring matter, should be treated with a solution of potash and soda. If hematin be present it will pass into solution, and the filtered liquid will appear green in a thin layer or red in a thick layer. The solution will also contain iron, which may be detected in the ash when the solution is evaporated and the residue ignited. The evaporation and ignition for this purpose must be conducted in silver and not in porcelain vessels, since the latter give up an appreciable amount of iron. It is found likely that a minute quantity of iron may exist in the potash or soda employed for this test, and this must be looked to. Experiments are about to be conducted as to the characters observed when the alkaline solution is examined by means of the spectroscope.

Lady Roberts has been untiring in her exertions on behalf of providing trained lady nurses for our Indian military hospitals, and has now placed three nurses at Quetta. It seems to have been an absolute impossibility to find any accommodation for them either in the town or the official buildings, and a home has therefore been built through private generosity, which is now ready for occupation. Thanks to this fund, there are now lady nurses in most of the hill stations and leading military hospitals in India, and it is satisfactory to hear that the medical reports give conclusive evidence as to their usefulness, not only in the far greater comfort with which the invalid soldiers are treated, but in appreciably diminished death rates in the establishments in which they are employed. The Indian Press congratulates Lady Roberts very warmly upon the manner

in which her useful scheme has been carried out by substituting skilled for unskilled nursing.

A wet nurse at Marscilles who contracted syphilis from the child she was engaged to nurse recently brought an action against the child's father, and was awarded damages to the extent of £60. The sentence was affirmed on appeal, and it having come out at the trial that the nurse had continued to suckle the child in spite of the danger which she ran in so doing, it is now proposed to confer a decoration of some kind on her in recognition of this somewhat novel kind of heroism.

The journals specially devoted to the subject are full of reports and discussions upon the epidemics which show themselves at certain intervals in cattle and other domesticated animals. Among these diseases none have of late attracted more attention than that which has recently decimated canaries and other cage birds. Not very long ago upward of eighteen hundred canaries died in one year at Norwich, and occasioned a loss to the owners estimated at about £1,000 sterling. A medical man is now stated to be hard at work inquiring as to the true cause of the disease. At present it is thought to partake of the character of diphtheria.

A circular letter just issued by the Local Government Board directs the attention of local authorities to the important duties and increased powers vested in them by the Infectious Diseases Prevention Act. The provisions for the inspection of dairies and the prohibition of the milk supply, for the removal and detention in hospital of persons suffering from infectious disease and for the burial of dead bodies are of a sufficiently drastic character, it may well be believed, to effectually prevent the occurrence of any of the scandalous incidents which heretofore occasionally rendered nugatory the most careful precautionary measures against the spread of infection. The new legislation imposes onerous duties on the local authority, and considerably modifies the accepted theory that an Englishman's house is his castle. But it is impossible to exaggerate the advantage accruing therefrom to the public health.

Surgeon O'Connell, of the Medical Staff, relates how useful he has found blistering over the vagus to prevent the vomiting in cases of cholera. In one case where all the usual methods of treatment had failed, and the vomiting being incessant, he painted the right side of the neck over the course of the pneumogastric nerve, from the styloid process to the clavicle, with liq. epispaeticus (B. P.), and found in from ten to fifteen minutes the vomiting ceased and the patient could retain whatever was given him, food or medicine. This result lasted some hours, and whenever the vomiting recommenced the blistering fluid was at once reapplied, it being put alternately on each side of the neck in such a way that nothing more than redness of the skin was produced, the amount of irritation being found quite sufficient to prevent vomiting. This case made a rapid recovery, being out of danger in twenty-four hours.

Hypnotism seems to be generally regarded by English medical men as a neurotic epidemic. Its possible value as an aid in the cure of drunkards has done as much as any thing to attract favorable attention to it; but Dr. Norman Kerr, whose experience in the treatment of inebriates is extensive, has given his testimony against it. Since he discussed the subject sometime ago before the British Medical Association in a paper entitled "Should Hypnotism have a Recognized Place in Ordinary Therapeutics?" he has been confirmed in his distrust of the alleged hypnotic cure. In republishing his paper he says his own experience, with that of professional colleagues who, like himself, would have been glad to have found in hypnotism a safe and reliable remedy, has shown him that hypnosis is not reliable, and is, especially from its possible after consequences, unsafe. He says he keeps his mind open for further evidence, but in the meantime regards the alleged advantages of hypnotism as far outweighed by its disadvantages and dangers.

Among the latest recruits to the corps of skilled nurses is Lady Alexandra Leveson-Gower, only daughter of the Duke of Sutherland, her ladyship having become a probationer at one of the most important of the metropolitan hospitals.

The chief medical officer of the Military Prison Department has been comparing particulars of the soldiers of the old time and the new in the British army. His observations refer to ten thousand men, and he finds that the age at enlistment was generally rather lower twenty years ago than it is now. The prevailing age of enlistment in the old days was between eighteen and nineteen; now the number enlisting at that age has fallen off, and those enlisting between nineteen and twenty have greatly increased. The average height, five feet six and three fourths inches, is kept up as in the old times. There is a vast improvement in the moral tone of the army and in its physical and mental condition. Drunkenness and disgraceful conduct have, according to the doctor, greatly decreased.

Dr. Snow, Surgeon to the Brompton Cancer Hospital, holds that malignant disease has in many instances a neurotic origin, and lays great stress on the internal administration of opium and morphine. Opium, he thinks, not only relieves painful symptoms, but also retards cancer growth. Smoking is a convenient plan of administering this drug in incurable cases, being a convenient and pleasant way of inducing the opium habit.

An agitation has been commenced in India to make twelve years the age at which consent may be given for sexual relations to begin. Sir Joseph Fayrer is in favor of it being put at sixteen years of age.

LONDON, September, 1890.

BERLIN LETTER.

During the recent International Medical Congress Dr. Gluck, of Berlin, exhibited a number of cases illustrating a unique and rather startling innovation in the domain of surgery. In the exhibition hall he showed a skeleton in which the shoulders, the elbow, the wrist, the knee, and the ankle joints were replaced by joints made from ivory. One of the dorsal vertebræ was likewise replaced by an ivory one, but Dr. Gluck remarked that he "had not done that operation yet." He proposes to excise joints where necessary and replace them with artificial ones from ivory. The joint being excised, the ends of these artificial bones

are driven into the medullary canals of the real ones, pegged securely in place, and then the soft parts and skin united over the artificial joint. To illustrate the feasibility of this procedure Dr. Gluck exhibited one case of excision of the knee joint, three cases of excision of the wrist joint, and one case where the metacarpal bone of the long finger had been replaced by ivory. The metacarpal bone case had entirely healed and was apparently a success, only the man could not use his finger, which was stiffly held somewhat flexed, any attempt at motion producing considerable pain. The other cases after some weeks were still discharging pus, and looked far from well. The excised knee, however, was discharging very slightly, and the patient was able to flex the leg to about 110° apparently without pain.

It is interesting to note the methods employed here in making abdominal sections. One case that I saw operated on by Dr. Veit will serve as an illustration. The patient was a woman not yet past the climacteric with an abdominal tumor of long standing. Four days before operation she had had for the first time considerable abdominal pain. Two days later she was admitted to the hospital. A slight rise of temperature was noted, not higher than 101° F., however. On the next day the section was made in the following manner: The patient was placed on a table with an inclined plane, with head down, knees about two feet higher than the head, the legs being flexed over the end of the plane and made fast. Dr. Veit states that this position was first adopted for additional safety in giving chloroform. It was afterward found that it served the further purpose of making the tumor present immediately under the incision wound, the intestines by the force of gravity settling down against the diaphragm. The instruments had been sterilized immediately before operation by exposure of an hour and a half to a temperature of 150° C., dry heat. The catgut was put in a paper envelope and sterilized with the instruments. The gauze was sterilized by same length of time exposure to steam heat, 100° C. The skin was washed with alcohol and then with a sublimate solution, strength 1 to 2,000. An incision was then made five or six inches in length, the

operator coming immediately down upon the tumor, the sac of which appeared very deeply congested. He cut into this with the knife, allowing the fluid, which was of a dirty plum color, to escape over the table and the person of the patient. No attempt was made to prevent its running into the abdominal cavity. Two gelatine tubes were inoculated from the contents of the cyst. The tumor, which was about the size of a large hat, was found to be twisted four times on itself, producing strangulation. This accounted for the pain and the deeply congested appearance of the sac, which on further examination appeared almost gangrenous. The pedicle was narrow and attached to the left ovary. This was tied off with catgut ligatures and excised. The abdominal cavity was gently mopped out with pieces of gauze, which were employed instead of sponges. No pains were taken to mop out the cavity thoroughly. The incision wound was closed completely by five or six deep and two or three superficial silver wire sutures. The dressing consisted of the before mentioned sterilized gauze directly over the wound; over this was put a large sheet of rubber tissue, then cotton and a roller bandage.

After such an operation Dr. Veit places a sand-bag over the patient's abdomen. The weight of this is at first fifteen pounds, which is gradually decreased and taken off at the end of a week. Patients are said to bear this with no discomfort. Where Dr. Veit deems drainage absolutely essential he makes it from Douglas' cul-de-sac through the vagina, closing up entirely the external wound. It is now ten days after operation, and the patient has done finely. The day after operation the temperature was 101° F. At no time has it been higher than that, and to-day it is normal. The silver wire sutures are to be taken out to-morrow. The gelatine tubes inoculated with fluid contents of the cyst both show a plentiful growth of streptococcus.

The points of special interest in this case are, first, the non-use of any fluid, antiseptic or otherwise, to wash out the abdominal cavity; and secondly, the immediate and complete closure of the abdominal incision with no provision for drainage, even in this case where strangula-

tion had occurred almost to the point of gangrene.

The *Berliner Klinische Wochenschrift* reports the following discussion of the question of abdominal drainage at the International Medical Congress:

Saenger, of Leipsig, said that drainage of the abdominal cavity has few followers in Berlin, though the greatest American and English surgeons employ it. He himself uses a combined drainage, a bent glass tube with iodoform gauze, the gauze being renewed in twenty-four hours. This drainage is a safety valve, and vaginal drainage can be dispensed with. Especially in case of ruptured pyosalpinx is drainage to be recommended.

Cushing, of Boston, said that he considered the drying out of the cavity especially important. He went further than Saenger in that he was principally for drainage. When pus or fees or strong transudation occur in the abdominal cavity, drainage is indispensable. There is no contra-indication. He washes out the cavity with sterilized water, and puts in a glass drainage tube, which is replaced in two days by a rubber tube. In two days more the latter is taken out.

Bantock, of London, and Tait, at Edinburgh, expressed themselves entirely for drainage. The latter employs straight drainage tubes from glass. The danger, in his opinion, is not from fungi, but from necrosis of tissue.

JAMES B. BULLITT, M.D.

BERLIN, September 30, 1890.

Abstracts and Selections.

THE NON-TUBERCULAR AND NON-CARDIAC HEMOPTYSIS OF ELDERLY PERSONS.—(Sir Andrew Clark, Bart., M.D.) Many years ago, when examining the evidence of the arrestment of phthisis and endeavoring to determine the conditions in which it occurred, I was struck with the large number of cases of hemoptysis occurring in elderly persons who were at the time and remained afterward free from signs of pulmonary tuberculosis or of structural disease of the heart. Being in those days completely influenced in my views of hemoptysis by the teaching of Dr. Walshe, I ascribed every case of pulmonary hemorrhage in which there was no heart disease or aneurism, or malignant growth, to tubercular disease of the lung. Per-

haps I carried to an extreme issue the opinions of this distinguished master; at any rate I must confess that the consequences were not satisfactory for the patients or for me. At last, however, there occurred in the wards of the London Hospital a case of fatal hemoptysis, which not only made plain the error of my views, but revealed a cause hitherto, I believe, unnoticed of pulmonary hemorrhage. The patient, a man between fifty and sixty years of age, was admitted for an attack of subacute bronchitis. He had been for many years the subject of a moderate progressive osteo-arthritis, and during the last four or five winters had suffered from severe bronchial catarrh. The attack from which the patient suffered on admission was of the ordinary character; there were signs of some congestion at the posterior bases, and of emphysema of the front part of both lungs, but nothing was found to suggest the existence of tubercular disease. The heart and blood-vessels were sound; there was only moderate fever. The patient was placed upon a light diet and treated with alkalies, alterative aperients, and counter-irritants to the chest. About a fortnight after admission the patient began to cough up blood in small quantities at short intervals, and in spite of all that could be done according to the approved therapeutical teaching of the time—in spite of absolute rest, the strictest regulation of supplies, the application of ice to the chest, and the liberal use of various astringents—the bleeding persisted, and within a week the man died. The *post-mortem* revealed to the naked eye little that was unusual and nothing that was unexpected. The heart, the larger vessels, and the arterial valves were free from obvious structural change. The bronchial mucous membrane almost everywhere was swollen, congested, violet colored, and coated with a muco purulent secretion. The anterior parts of both lungs were pale, dry, and emphysematous, and curious patches of emphysema surrounded by hemorrhagic extravasations were noticed in the back and lower parts of both lungs, which were loaded with blood. Nowhere could there be discovered the smallest evidence of tubercular disease, of any malignant growth, or of any sort of coarse structural change which could account for fatal hemorrhage. A most minute examination, carried out with the aid of the microscope, brought plainly to light two important facts. The first was that the seat of hemorrhage was in the immediate neighborhood of the emphysematous patches, and the second was that the minute vessels, the terminal arteries for the most part, were in those localities always diseased. And finally, it appeared in the highest degree probable that there existed a direct casual relationship between the condi-

tion of the blood-vessels, the emphysema, and the hemorrhage. For wherever there was an emphysematous patch there was a diseased artery; wherever the artery was much diseased the capillaries and venous radicles were also affected; and generally, although not always, where the terminal artery was obstructed and degenerating there was adjacent hemorrhage. Through the observations of these facts and their relations I was led to conclude that the order of events issuing in hemorrhage arose and proceeded in the following way: I inferred that the initial visible movement in the malady had been some minute structural change in the terminal branch of the pulmonary or of the bronchial artery, and in consequence of this there had been brought about more or less complete obstruction of the supply of blood through the territory involved; that following this there arose degeneration of the capillaries and venous radicles, determining a true atrophic emphysema, and that the integrity of the blood-vessels being thus impaired, the formation of thrombi or recurrent condition of pressure had brought about the hemorrhage which ended in death.

Now arose the cardinal question presented by this case, and necessary to be answered if any fresh knowledge were to be derived from it: What was the intimate nature of the structural vascular changes to which I have adverted? There were two ways of replying to this question, each was distinct in itself, and the one which was most regarded was of the least importance. The small question was, What were the visible characters of the structural alterations in the blood-vessels? The large and crucial question was, What was the nature of the primitive dynamic changes, and which alone gave them form and meaning? In them and not in the vascular changes lay the importance of the case. The structural changes discovered in the affected blood-vessels were limited to nuclear proliferation in the middle coat, and an amorphous and hyaline infiltration of it and of the intima. When I endeavored to determine the significance of these changes, and for this purpose studied the life history of the case, when I saw that the patient had been for years an arthritic, that he had suffered on many occasions from many of the constitutional manifestations of this diathesis, and that the structural changes in the pulmonary blood-vessels were akin in character to those which were found in the diseased articulations, I permitted myself to conclude that the malady was of an arthritic nature, and that I had seen and dealt with a case of what might be called without serious scientific impropriety "arthritic hemoptysis."

Some seven years ago Sir William Jenner, Dr. Wilson Fox, and I were summoned together to consult about a lady suffering from an incoercible hemoptysis. She was a Jewish lady, over sixty years of age, very stout, very "rheumatic," and always ailing. She had nodular finger joints, frequently recurring bronchial asthma, and occasional outbreaks of either eczema or of urticaria. Ten days before our visit, when suffering from ordinary catarrh without accompanying fever, the patient began to cough up blood, and had continued to do so in small quantities at intervals of three or four hours since. The patient had a somewhat large heart, but there was no murmur, and there was no evidence of systemic arterial disease. Within the previous two days the pulse had become quick and frequent, and the temperature had risen to close upon 100°. In the lungs there were signs of generalized bronchial catarrh, of emphysema, and of basic congestion. The patient complained of frequent cough, of great oppression of chest, and of growing difficulty in expectorating. She had, furthermore, a loaded tongue, thirst, loss of appetite, a swollen liver, and all the signs of a gastro-enteric catarrh. She had been carefully treated by absolute rest, fluid food, ice to the chest, and in succession by lead, gallic acid, and hypodermic injection of ergotin. After full discussion it was determined that another method of treatment should be tried. The patient was ordered to have a light and rather dry diet, to be sparing in the use of liquids, to discontinue the ice, to have a calomel pill at night, followed by a saline cathartic on the succeeding morning, and to take an alkaline mixture with ammonia between meals twice a day. Within thirty-six hours the bleeding ceased, and the patient made a speedy and complete recovery. About a year and a half ago the patient consulted me at my house for subacute rheumatic arthritis. She told me that since she saw me first she had had one attack of bleeding, and that it was quickly cured by calomel and salines.

About six years ago I was summoned to meet Mr. MacLaren in consultation about the case of a solicitor who had been suffering from an obstinately recurring hemoptysis of small amount. The patient was over sixty years of age, had been always delicate, and often suffered from incomplete attacks of what was considered to be rheumatic gout. He had rimmed finger-joints, patches of dry eczema, and occasional nervous headaches. A few weeks before our consultation he had contracted a feverish bronchial catarrh and was confined to the house. After a fortnight's cold he began to have some oppression of chest and to be short breathed. This was followed by a small hemoptysis which

gave relief, but the hemoptysis recurred, and at our consultation there was no sign of its cessation. The patient had no fever, and only a slight hurry of circulation. There was a general bronchial catarrh, the fore parts of the lung were emphysematous, and there was some basic congestion, greater on the right side than on the left. The tongue was furred. There was anorexia with some thirst. The bowels were inadequately relieved, and the urine was pale and of low density, but free from albumen. The patient was directed to rest and keep warm, to live upon a light semi-solid diet, to be sparing in the use of liquids, to be freely counter-irritated over the chest, to have a succession of small doses of calomel at bedtime, supplemented by saline aperients in the morning, and to take between meals, twice or thrice in the day, a mixture containing iodide of potassium, bicarbonate of potassium, and ammonia. This treatment was not quite agreeable to the patient, who had medical views of his own. Nevertheless, it was adopted, and appeared so far successful that within twenty-four days of its adoption the hemorrhage had ceased. I heard of the patient from a relative some months ago, and I was told, although he led a too sedentary life, he was well and at work.

I conclude with a statement of the propositions which I have framed out of the results of my own inquiries. These propositions are as follows:

1. That there occurs in elderly persons, free from ordinary diseases of the heart and lungs, a form of hemoptysis arising out of minute structural alterations in the terminal blood-vessels of the lung.
2. That these vascular alterations occur in persons of the arthritic diathesis, resemble the vascular alterations found in osteo-arthritic articulations, and are themselves of an arthritic nature.
3. That, although sometimes leading to a fatal issue, this variety of hemoptysis usually subsides without the supervention of any coarse anatomical lesion of either the heart or the lungs.
4. That when present this variety of hemorrhage is aggravated or maintained by the frequent administration of large doses of strong astringents, and by unrestricted indulgence in liquids to allay the thirst which the astringents create.
5. That the treatment which appears at present to be the most successful in this variety of hemoptysis consists in diet and quiet, in the restricted use of liquids, and the stilling of cough; in calomel and salines, in the use of alkalis, with iodide of potassium, and in frequently renewed counter-irritation. — *Canada Practitioner.*

HOSPITALS FOR THE TREATMENT OF PHTHISIS.
In a brief paper presented to the Medical Section of the Tenth International Medical Congress, recently held at Berlin, and published in the *Münchener Medicinische Wochenschrift*, August 26, 1890, Dr. Hermann Weber, of London, considers the treatment of phthisis, and makes an earnest plea for the establishment of institutions for the exclusive treatment of poor phthisical patients. As yet we know of no specific remedy for phthisis. If a disease can not be attacked directly it must be combated by strengthening the entire organism, including the diseased focus. It is a recognized fact that the greater the want of cleanliness and the larger the number of persons present in any cubic space, the larger will be the number of microbes. Suitable ventilation diminishes this number. Thus the indications in the treatment of such a disease as phthisis are: to support the general nutrition, to control cough, fever, hemoptysis, and sweats, and to disinfect the air of the rooms in which the patients live.

No class of cases requires more constant observation than consumptives do. On this account their treatment in institutions devoted exclusively to that object possesses, Dr. Weber rightly says, great advantages for most patients, and constitutes for many a condition necessary for convalescence.

In this connection climate becomes an important element. In the great altitudes of mountainous regions the air is clearer and more dilute, the barometric pressure is less, the amount of moisture is slight, the temperature is lower, there is much sunshine, and the wind is relatively still in winter. Here out-door exercise is almost always safely possible, and the appetite improves. The dryness and coolness of high regions causes increased pulmonary activity and secretion with increased cardiac action and pulmonary circulation, and the expansion of healthy lung structure exerts a curative influence upon adjacent diseased tissue.

In the selection of a residence for a phthisical patient. Dr. Weber says the following points should be considered: the air should be as free as possible from dust and organic impurities of all kinds; the soil should be dry; a southern or southwestern exposure should be selected; the dwelling should be high above the valley and the water-level, and, if possible, close to a wood, especially a pine wood. The place should be one on which there is abundant opportunity for physical exercise and for suitable employment, and provided with protected walks and seats. Rooms for patients should have a sun exposure, be well ventilated and amply large. For weak patients with fever there ought to be

verandas, with beds or lounges for use during the day.

The establishment and maintenance of institutions for the care of the poor phthisical would entail the expenditure of large sums of money, but the advantages derived from them would more than compensate for the additional expense. The condition of the patients would be alleviated and the condition of their families would be much improved. By timely treatment not a small proportion of patients would be cured entirely, or to such a degree as to become capable of work. The patients would learn a mode of living and acquire habits which would guard them against new attacks or relapses. They also learn how to dispose of their sputa so that it shall not be dangerous to others, and so the community is a gainer. Meanwhile general hospitals are by so much relieved of pressure and made free for the treatment of acute diseases. In all, it is clear that special hospitals for the treatment of consumptives are one of the great needs of the present day.—*Med. and Surg. Rep.*

A NEW OPERATION FOR STRICTURE OF THE RECTUM.—In no reports upon rectal surgery has the writer seen presented the principles and procedure of the following operation for stricture of the rectum, and therefore novelty is claimed in this report.

Mrs. B., aged thirty-two years, giving history of syphilis, a subsequent rectal stricture, and fistula in ano.

The symptoms of stricture growing worse each month, and not having more than one operation on bowels a week, brought patient under examination the 28th day of July, 1890. After inducing anesthesia, examination revealed a fistulous tract from superficial sphincter opening one and one half inches from anus, also flaps or folds of mucous tissue around the anus; within were infiltration and thickening of mucous and submucous structure, and about three inches above the anus an annular stricture almost occluding the rectum.

After dividing the fistula and superficial sphincter, a pair of uterine dressing forceps were introduced through the stricture, by means of which sufficient dilatation was made to introduce a probe-pointed bistoury. Two incisions were then made, dividing the stricture bilaterally. Pratt's large dilating speculum was then introduced, dilating the rectum to its full capacity, being frequently turned in various directions for the purpose of thoroughly using a douche of warm carbolized water, and curette and silver nitrate to all suspicious pockets.

Keeping up these antiseptic precautions for about twenty minutes, the speculum remaining

in situ, paralyzing all muscular action, no difficulty was experienced in bringing down the stricture with a tenaculum and securing with an Emmett needle armed with catgut suture or loops, the mucous membrane, from the stricture to the anus, falling in folds and protruding from the anus like external pile tumors. An assistant then holding the stricture in position by means of the loop, the posterior folds of mucous tissue were removed with tenaculum and scissors; then making an incision half way around the anus posteriorly and removing corresponding cicatricial tissue in the stricture, the two surfaces thus denuded were securely brought together with catgut sutures. Nothing was at the time done with the protrusion of mucous folds on the anterior surface.

Usual dry dressing was applied, and patient, taking an opiate, was put to bed. No suffering or inconvenience followed. The bowels moved each day, and on the eighth day patient returned, when, with the aid of solution cocaine, the anterior folds left protruding on the day of the operation were snipped off with tenaculum and scissors. Entire recovery on fourteenth day from first operation. No trouble has arisen since.

The results of this operation were seen at various times by Drs. Jelks, Miner, Gaines, Collings, and Barry, jr., of this place, all of whom expressed their satisfaction.—*M. G. Thompson, Journal Medical Association; from advanced sheets.*

OPERATION FOR PROLAPSE OF THE RECTUM. In the *Annals of Surgery*, April, 1890, Dr. John B. Roberts proposes and describes how he conducted, in the case of a young woman, an operation for proctorrhaphy, which seems to meet all the indications. The anal aperture was so dilated that he could readily insert the ends of the five fingers of his hand into the rectum. When the bowel was prolapsed it protruded from the anus as a sausage-shaped mass about four inches in length. He then determined to cut out a V-shaped portion of the posterior wall of the rectum, the apex of the V being upward, and at the same time to diminish the anal aperture by excising a part of the sphincter muscle. This procedure would diminish the caliber of the lower part of the rectum and give it a narrow orifice, so that the inferior portion of the intestine would diminish in diameter as it approached the anus, instead of being a tube with a wide, almost funnel-shaped lower opening through which prolapse was constantly occurring.

The steps of the operation were as follows: Making a small incision in the middle line near the point of the coccyx, he introduced his fin-

ger and broke up the cellular connections behind the rectum, as is done in preparing to excise its lower end for carcinoma. The sphincter muscle was then divided in two places by incisions, each about a half inch away from the posterior median line. By carrying these incisions obliquely backward through the skin until they met at the original incision near the tip of the coccyx, he included between them a triangular portion of tissue which had as its base about one inch of the anal sphincter. With scissors he then cut from the posterior wall of the rectum a long triangular piece consisting of the entire thickness of the wall. The apex of this V-shaped section was situated about three inches up the gut, while its space corresponded with the space between the incisions by which one inch of the sphincter muscle was removed.

After hemorrhage had been controlled with catgut ligatures, chromicized catgut sutures were used to bring the divided wall of the incised rectum together. The first suture was introduced at the apex of the wound, that is, three inches above the anus, and was tied with the knot within the bowel. Successive sutures were inserted, with intervals of about one third of an inch between them, until the lower margin of the rectal wound was reached. The last intra-rectal suture was placed just inside the margin of the anus. They were all tied upon the mucous surface of the bowel so that the knots were within the lumen of the intestine. In this manner the lower portion of the rectum was greatly reduced in diameter. The divided ends of the anal sphincter muscle were brought together by two catgut sutures and one wire shotted suture. The anal aperture was thus reduced, so that it was barely possible to introduce the tip of one finger; originally five fingers could readily be thrust into it. A rubber drainage-tube was then introduced into the cavity between the rectum and the sacrum, and the wound leading backward from the anus to the coccyx was closed with numerous shotted wire sutures carried deeply by means of a strong and curved cervix uteri needle.

The result of Dr. Roberts' operation was not very good, but this fact he attributes to a diarrhea and the entrance of fecal matter into the wound.

A CASE OF TRAUMATIC TETANUS: RECOVERY.—Albert T., aged fifteen years, while playing leap-frog with an elder brother on June 18th, was accidentally knocked over, and in doing so tore down a flap of skin from his forehead. The skin was laid in position and strapped over by his mother, and nothing unusual occurred until the 26th, when she noticed that

the boy could not open his mouth. He was brought for advice on the 30th, and when seen the jaws could not be opened more than half an inch, but there was nothing to account for it. There was a wound on the forehead which had begun to suppurate, though the flap of skin had in great part united. This was dressed and the boy ordered to bed. On July 1st he was seen at home; the jaws were more tightly closed, he had an anxious expression, some risus sardonicus, and the muscles of the neck were standing out prominently in a state of tonic spasm. To speak at all, he had to depress the lower lip with his finger. He was able to swallow; the pulse was quiet, and the temperature normal. He was ordered nourishing fluids, an icebag to the neck, a quiet and dark room, and a mixture containing five minims of tincture of belladonna to a dram of water every four hours. July 2d: Body stiff; begins to start at times. Abdominal muscles hard; limbs relaxed; jaws open somewhat when asleep. 3d: Spasmodic attacks occur once or twice a day, during which he bites his tongue. Wound discharges some pus; to-day a thread of grass fiber was seen, and removed through the sinus. 5th: State of complete and continuous opisthotonos now present, with occasional spasmodic seizures, during which he becomes cyanotic. Is fed with difficulty, so that nutrient enemata were ordered to be given, as swallowing brought on an attack. The mixture was changed to one containing three minims of chloroform, three minims of tincture of digitalis, and ten minims of spirit of sulphuric ether, in a dram of water every four hours, as the heart and pulse seemed failing, with belladonna liniment to spine. From July 8th the spasmodic attacks began to be less severe; opisthotonos continued; but the arms became stiff; the swallowing was easier, but he had lost a good deal of flesh. July 28th: To-day another piece of grass fiber was removed from the wound, which then soon healed. For the first time he was just able to open the mouth and protrude the tip of the tongue. August 3d: Muscular spasm nearly gone; sleeps and swallows well. Medicine omitted. About the 10th he was up and well. Throughout the course of the disease the temperature was normal, and it may be concluded that the irritation from the grass fiber was a potent factor in lighting up the mischief.—*H. H. Fisher, M. D., Lancet.*

KELOID.—The Edinburgh Medical Journal, August, 1890, says Leloir and Vidal have contributed some interesting facts to our previous knowledge of keloid. They describe the spontaneous and the cicatricial forms, and add what has been often confused with these, an account

of hypertrophic scars. In spontaneous keloid the number of the individual growths is sometimes very great. Thus, in a case observed by Amicis there were 318, the greater number spontaneous, but a certain portion secondary or cicatricial. They were arranged nearly symmetrically, and were most numerous on the arms. Examined microscopically, the epidermis and its interpapillary cones preserve their normal aspect. Keloid, unlike cicatricial tissue, arises in the corium, up to that time intact, and is, consequently, not a formation destined to repair a loss of substance. The persistence of the interpapillary cones and of the papillae is not met with in the secondary or cicatricial keloid, and is limited exclusively or nearly so to the true or spontaneous form. The authors, after careful examination, have not been able to find any alteration in the nerve filaments or to discover the smallest microbe. Cicatricial or secondary keloid is that which is developed in the thickness of a scar. It begins below the cicatricial neoplasm or at a point in its margin, but the ultimate growth has no connection with the extent of the scar in which it has arisen. Kaposi has stated that the hypertrophic scar closely resembles keloid, but the authors do not accept this view. An hypertrophic scar is usually redder, more vascular, and not so hard as keloid. The latter, once removed, recurs almost constantly in the cicatrix left after the operation, or in the course of the stitches; excision of hypertrophied scars cures them completely, or they may spontaneously disappear. The authors have seen two instances of recent cicatricial keloid cured under the continued and regular application of mercurial plaster. The true keloid they find is best treated by repeated scarifications carried nearly as deep as the growth, and not more than two or three millimeters beyond its margin. These must be continued till there is a uniformly pliant and thin cicatrix. Should a nodule of induration not larger than a pin's head remain, this little by little enlarges, and the neoplasm recurs. The scarifications are to be two millimeters apart, and crossed at right angles. The pain can be much lessened by painting the part once or oftener with chloride of methylene.

THE PROTEIDS IN THE URINE IN VARIOUS FORMS OF ALBUMINURIA.—The conclusions reached by Paton are as follows:

1. Senator was right in his conclusion that, in all cases of albuminuria, both of the chief proteids of the blood plasma are present.
2. The proportions of serum-albumin and serum globulin may vary within wide limits, the quotient of the amount of serum-albumin divided by the amount of serum-globulin being

sometimes as low as 0.6, sometimes as high even as 39.

3. In acute nephritis, when blood is absent the quotient is high; when hemaglobulin is present the globulin is, of course, in excess.

4. As the disease becomes more chronic, the quotient sinks, and in the terminal stages of the disease may sink as low as 0.6. This alteration depends upon the condition of the patient rather than upon the state of the kidney, and is probably related to a similar change in the blood plasma.

5. Amyloid disease can not be distinguished from the ordinary forms of chronic nephritis by the high proportion of serum-globulin, as was formerly maintained by Senator.

6. Maguire's suggestion that functional albuminuria is characterized by the high proportion of serum-globulin is not correct.

7. In every case the proportion of the proteids to one another varies much in the course of the day, and, in comparing the proportion of these proteids in different cases, it is necessary to examine specimens of the mixed urine of the twenty-four hours, and to take into account the nature of the diet.

8. The proportion of serum-globulin is always highest during the night. It falls greatly after breakfast, when it reaches its lowest point in the twenty-four hours. In most cases it again rises in the evening. The precise connection of the alteration in this proportion with the taking of food can not be considered as definitely settled.

9. Milk diet, as observed by Lecorché and Telamon, has a peculiar effect in increasing the proportion of serum-albumin.

10. The amount of proteids passed appears to bear a tolerably direct proportion to the amount of proteids taken, and, excluding milk diet, the increase of the proteids in the urine on a rich diet in these substances appears to be chiefly due to an increase in the serum-albumin.

11. The variation in the proportion of the albumin to the globulin in the urine is frequently so great that we can hardly believe that it is connected with a similar change in the plasma. The few experiments we have performed would suggest that a high pressure favors the transudation of serum-albumin, while a low pressure increases the proportion of globulin transuded.—*British Medical Journal*.

HEPATIC ABSCESS.—At a recent meeting of the Academy of Medicine of Paris, M. Hache related the history of four cases of abscess of the liver, of which two were cured and two died, and made the following observations: Pain in the hepatic region, fixed, limited, and exasperated by pressure, whether irradiating to

the shoulder or not, may be considered as one of the best symptoms of the existence of an abscess. The pain may be very violent without being accompanied by any complication in the peritoneum or the pleura. However, too much importance can not be given to it as an indication of the exact locality of the purulent seat, as the abscess may be at a certain distance.

Widening of the intercostal spaces is a consequence met with in all enlargements of the liver, but where one or two are abnormally enlarged the surgeon would be right in supposing that under that spot the liver was more particularly enlarged. Fluctuation can not be obtained unless the abscess is superficial. Exploration of the organ, even with a large trocar, is inoffensive; but M. Hache preferred the needle, as it allowed to seek for the abscess if not found at the point supposed. As to the subsequent operation, the advantages of incising simultaneously the liver and the abdominal wall, as recommended by Little, were in his mind very doubtful. The after-treatment is simple. All washings or injections should be proscribed if the abscess flows freely and without odor. Iodoform powder poured into the drainage-tubes is sufficient. The prognosis must be based on the general condition of the patient, and especially of the digestive tract, for anorexia and diarrhea are the two great enemies to be dreaded.—*Medical Press and Circular*.

XEROSIS: ESSENTIAL OR PRIMARY SHRINKING OF THE CONJUNCTIVA: PEMPHIGUS OF THE CONJUNCTIVA.—This interesting but fortunately rare disease has, up to the present, I believe, proved incurable in spite of many methods of treatment which have been tried; sooner or later the end is the same—the whole conjunctival sac shrinks, and the cornea becomes opaque. Many applications have been used; perhaps most success has been obtained by partial or complete union of the edges of the lids. I wonder if, in the early stages, the disease could be arrested by transplantation of conjunctiva, such as from the rabbit; it need not be done all at once, but little by little, and could readily be performed under cocaine. Dr. Wolfe's method might be used.

I do not know whether this has ever been suggested or carried out; very likely it has; it is difficult to hit upon something new nowadays. I have not seen a case of late, but should be disposed to give this method a trial. Where the outlook is so dark I think one might try any thing; it could but fail. My plan would be to remove a flap of the diseased conjunctiva, beginning with the inferior sac, and to put in a considerably larger piece of healthy conjunctiva—say from the rabbit.—*S. J. Taylor, M. D., Lancet*.

The American Practitioner and News

"NEC TENUI PENNÆ."

Vol. X. SATURDAY, OCTOBER 11, 1890. No. 8

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the EDITORS OF THE AMERICAN PRACTITIONER AND NEWS, Louisville, Ky.

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THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

The meeting of this society, just held in Louisville, was in every way a success. The books of registration showed that a large number of delegates, were in attendance, while the visitors were many. The programme was too full for any thing like successful utterance in the time allotted to the meeting, and as a consequence many papers were read by title. The scientific sessions were all well attended, and under the able administration of President Mathews a large amount of work was disposed of. Few of the papers read were under the average of medical society deliverances, while some showed their authors to be men of fine intellect and capacity for work. What is true of the papers is true of the discussions. They were spirited and of unwonted interest. The proceedings were strictly scientific, all topics relative to ethics, politics, and the irrepressible question of medical education being promptly ruled out of order.

Several distinguished visitors from the East contributed no little to the interest of the occasion. Dr. Frank Woodbury, of Philadelphia, and Dr. Stansbury Sutton, of Pittsburgh, read

able papers in the sessions, while Dr. John A. Wyeth, of New York, delivered the special address of the society to a large and admiring audience. This genial gentleman and eminent surgeon began his professional career in our city, having entered upon his first course of lectures at the Medical Department of the University of Louisville, from which he graduated in 1869. The city was honored by his presence, and extended to him a most hearty welcome, which was gracefully reciprocated in many ways with Southern warmth by the ardent, modest, simple-hearted man. His able handling of the vexed question of medical education and his beautiful tribute to his teachers in medicine in the address, with his masterly demonstration of his bloodless amputation at the hip-joint in the lecture hall of the University, have passed into the medical traditions of the town.

The social features of the meeting were not suffered to fall below the high level of Louisville's former doings in this direction. The dinners and receptions were sumptuous, and, being graced by the ladies, lacked nothing in beauty, brilliancy, and zest. The banquet was one-sided, but the viands, wines, and oratorical effervescences were competent to keep the gustatory and auditory reflexes of the guests in delightful ebb and flow until the time

"When merry milkmaids click the latch,
And rarely smells the new mown hay,
And the cock hath sung beneath the thatch
Twice or thrice his roundelay."

The exhibit hall was filled with wares pertaining to the doctor's work, and made a strikingly beautiful display. The best manufacturers of chemicals, pharmaceuticals, and instruments were represented. Among the exhibitors the editor found numerous old friends and added, he trusts, many new ones to the list that he hopes will never be filled. When one notes the vast sums of money, the wealth of invention, and high artistic skill expended upon the physicians' armamentarium, one can not suppress the thought that if hygienic and therapeutic successes were able to keep pace with progress here, disease would soon be banished from the earth, and the physician's occupation, like Othello's, be

gone. But the solemn truth remains that we are fighting a most unequal battle with Death, whose sentence of execution upon the victim may be sometimes suspended, but never commuted or set aside.

In the election of Dr. C. H. Hughes, of St. Louis, to the presidency the society pays just tribute to one of its oldest and most eminent Fellows.

Too much can not be said in praise of the work of the energetic and almost ubiquitous chairman of the Committee of Arrangements. To making the Louisville meeting a success, Dr. Bloom devoted without stint his valuable time and the best of those rare qualities which distinguish him as a physician and a man. In the result he has the congratulations and the gratitude of all.

The president, Dr. J. M. Mathews, came to the chair from a sick-chamber. Though in a state of physical weakness, that heavily taxed his strength he was at the desk at every session, where he presided with dignity, and good judgment.

Our next issue will contain a report of the proceedings and the full text of some of the papers read.

Among the Fellows we were happy to greet many old friends, classmates, and pupils. There were also among these not a few who now take their place upon our above noted ever open list.

Long live the Mississippi Valley Medical Association. "May its shadow never grow less," and may the sun of science soon cast it this way again!

Notes and Queries.

PATENT AND SECRET NARCOTIC PREPARATIONS.—The recent discussion by the Society for the Study of Inebriety of proprietary preparations containing alcohol, opium, and other narcotics seems to have aroused considerable interest throughout the country. In America, according to Dr. Craighill, of Virginia, one chloral preparation has made a large number of chloralomaniaes. Of twenty loudly vaunted "cures" for opiomania nineteen contained

opium in considerable proportion; the twentieth possessed the negative virtue of being innocuous, containing only granulated sugar. The extensively advertised "cures" for alcohol addiction were composed largely of alcohol, most of them being stronger in intoxicating properties than many varieties of ordinary alcoholic beverages. The discussion brought out the fact that similar mischief is wrought in England, though not to so great an extent as in the United States. It is difficult to suggest a remedy under the existing state of the law. If people will—and we fear they will in increasing numbers—purchase and consume such perilous articles, the composition of which is unknown to them, one thing, as proposed in a resolution of the Society, the legislature might do. We advocate as a remedy an act making it penal to sell any proprietary medical preparation unless the composition is printed on the cover.—*British Medical Journal*.

SEVERE AFFECTION OF THE VAGUS NERVE THE RESULT OF THE POISON OF INFLUENZA.—The following case, which came under my notice in the month of February last during the severe epidemic of influenza which prevailed here at that time, was related in the Section of Medicine at the late meeting in Birmingham during the discussion on Functional Disorders of the Heart, but owing to my accidental omission to prepare it for the press it was omitted from the account of that discussion in the *British Medical Journal* of August 16, 1890.

The case appears to illustrate in a very striking manner the effect of atmospheric conditions, especially those of an epidemic character, upon the heart's action, as well as upon the actions of those other organs supplied by the vagus nerve.

An elderly medical man, previously in good health and entirely free from any heart affection, was seized one day with a peculiar feeling of debility, with oppression of the cardiac region, but without any pain. He went about his work as usual, but it was with difficulty and languor. There was no cough or bronchial affection, and the appetite was as good as usual. On retiring to rest he felt deadly cold, and

then, for the first time, felt the pulse, which was beating in the most irregular and feeble manner, about 20 only in the minute being felt at the wrist. The feeling was entirely that of impending death, but there was no pain at or near the heart, and no sickness. A neighboring medical man first prescribed strophanthus in good doses, hot brandy and water, heat to the body, etc. In six hours the pulse became regular and much as usual. The impression at first was that this was an attack of angina, but angina without pain seemed an anomaly and a contradiction in terms. The next night there came on a violent spasmodic and exceedingly irritative cough, which lasted for several hours without intermission. The second and third nights were the same. This passing away, there supervened a violent gastric catarrh, which lasted for several days. When the cough appeared the patient began to think that the first attack was not of an anginal nature after all, and when the dyspepsia arrived he felt quite certain of it, for the affection of each of the three divisions of the vagus nerve in turn satisfied him that a poisonous influence of some kind had attacked its center; and what more likely than the poison of influenza?

Judging by this experience as to how life might have been and was very nearly cut short by the influence of this poison, it in no way taxes our credulity to believe in the rapidity with which death ensued in the epidemics of the middle ages, or even in the strict truth of the Scriptural account of the destruction of Sennacherib's army in a single night.

Given a little addition to the virulence of atmospheric poison during the epidemic of last winter and spring, that epidemic might easily have counted its victims by thousands and hundreds of thousands.—*Dr. William Strange, in British Medical Journal.*

CYANIDE GAUZE AS A DRESSING: REMARKS IN A HUNDRED CASES.—(A. S. Barling, House Surgeon.) The cases on which the following observations are made are the first hundred which were dressed with cyanide gauze in this hospital. They occurred in the ordinary course, and have not been picked in any way. This

being the case, some of them are of necessity slight, but the large majority are not. The list includes eight abdominal sections, six compound fractures, and nine hernias, besides the usual run of amputations, osteotomies, excisions of tumors, and incisions of abscesses. The first case was admitted on December 2, 1889.

The great advantage claimed by Lister is that this dressing does not cause irritation of the skin. How does our experience bear on this point? There is no doubt that with the carbolic and sal alembroth gauze, whatever care was used, a certain number of cases suppurated, this suppuration being apparently directly due to the irritation of the dressing. A case occurs to me which bears strongly on this point.

A boy was admitted here with a compound depressed fracture of the skull. The wound was cleaned most scrupulously and dressed antiseptically with sal alembroth gauze. All went well for a week, when on dressing it a large crop of pustules was found covering the whole of the skin which had been in contact with the sal alembroth. On again dressing it two days afterward the discharge from the deeper parts of the wound, which up to then had been serous, was purulent. There was never any rise of temperature, pointing to the fact that the suppuration was not septic in origin. I may add that this was not accounted for by the gauze being put on too wet, as it was wrung out as dry as possible.

In none of the cases treated by cyanide gauze has this effect been produced, so that our small experience goes to prove that on this point the dressing fulfills all that is claimed for it. Its antiseptic properties, regarded purely from a clinical point of view, seem to be as great as those of the blue gauze, and the cyanide does not dust out to any appreciable extent.

One more point. The powers of absorption of the cyanide gauze are much less than those of the sal alembroth, or perhaps I ought to say are exercised much more slowly. This was shown by the following simple experiment: Two exactly similar pieces of the two dressings were dropped simultaneously into water; the blue gauze sank in two seconds, while the other was left floating at the end of ten minutes.—*British Medical Journal.*

MILK AND ELECTRICITY.—An Italian scientist, Tolomei, has made a study of the souring of milk by thunder storms, and concludes that this rather annoying phenomena of the dairy and household is explicable on the ground of the production of ozone during such storms. It may not act directly upon the milk to sour it, he thinks, for he prefers not to ignore or discard the prevailing opinion that the change is due to the presence of the bacterium ferment and is allied to other fermentations. He assumes that in the presence of ozone, when it comes into contact with the upper surface of the milk—in the form of a layer superimposed on it, without agitation—the bacterium finds its most favorable conditions of propagation. Some experiments made by Tolomei go to show that ozone, when electrically generated without detonation, effects the souring of milk more rapidly than when its liberation is abrupt and accompanied with report.—*Journal American Medical Association*.

A SUBSTITUTE FOR TOBACCO.—Many different vegetable substances used as stimulating beverages in widely distant parts of the world have been shown to contain caffeine as their active principle. Only one substitute for tobacco has, however, as yet been discovered. This is the leaves of the *Duboisia Hopwoodii*, a shrub growing in Australia, the leaves of which are chewed by the blacks in the same way and for the same purpose as tobacco is chewed. The leaves contain an alkaloid piturine, which is said by certain chemists to be identical with nicotine, but more probably is only closely allied to it. Messrs. Langley and Dickinson have recently shown that the actions of nicotine and piturine are in every respect identical.—*British Medical Journal*.

TREATMENT OF CHOLERA BY THE CHINESE.—Dr. Alexander Jamieson, in his report on the health of Shanghai to the Inspector-General of Customs, states that the Chinese have many specifics for cholera, all equally inert. A few years ago all the dead walls in the settlement and suburbs were covered during the autumn with posters recommending a nostrum which on examination turned out to be

essential oil of peppermint. The native internal treatment is stated to be unintentionally evacuant, consisting of warm, bulky infusions and decoctions of nauseous herbs, which the patient rejects as soon as swallowed. Patients brought moribund into the hospital at Shanghai show that external applications also have been tried, such as scraping of the skin of the neck, moxa to the chest and limbs, and acupuncture here and there.—*British Medical Journal*.

THE HEART-BEAT AFTER DEATH.—A few days ago a criminal was executed at Epinal, France. Immediately after the execution, which was effected very rapidly, the corpse was given over to Dr. Gley, Professeur Agrégé at the Paris Medical Faculty. The heart-beats were observed during six minutes after death. Dr. Gley was able to study auricular and ventricular contraction, which he observed to be independent of each other. Dr. Halletté examined the dead body of another criminal executed at Montreuil, and detected the heart-beats a quarter of an hour after death.

CURING CONSUMPTION BY INOCULATION.—Whatever may be the results of Dr. Koch's experiments, about to be made, of curing consumption by inoculation, they are sure to lead to considerable disagreement among doctors; and, though success should crown his efforts, it is safe to predict that years will be required to introduce the process. In the meantime we may expect a renewal of the discussions that attend every proposed system of inoculation for any purpose. The importance of finding a cure for consumption will, however, excite general interest in the experiments to be made.—*Times and Register*.

DEATH UNDER CHLOROFORM.—On Saturday last Mr. Wynne Baxter held an inquest at the London Hospital concerning the death of a man aged fifty-one, who was admitted into the institution suffering from abscess of the thigh and an affection of the spine. On August 23d an operation became necessary, and was quite successful, chloroform having been administered. On the 3d inst. it became necessary to probe the abscess, for which chloroform was

again given; but, according to the report before us, death ensued before the patient was fully anesthetized. Mr. Andrew Smith, the house surgeon, stated that at the necropsy the heart was found healthy, though poorly nourished, while the lungs were not in the least affected.—*London Lancet, September 13th.*

TRANCE FOLLOWING INFLUENZA.—Dr. H. Appleton writes to the *London Lancet*: A lad aged sixteen years, who had always been healthy, contracted influenza toward the end of January. He was not then under my treatment, but was nursed in bed for a day or two. Having to attend to his duties as under-groom, he went to his work before the influenza had quite passed off. After a week's illness he was sent home, when he came under my care, suffering from mental derangement with continual delirium by day. He threw an infant on the ground, attacked a child with a poker, and ran about the house half dressed; but at night he rested well without an anodyne. Aperients were administered, and he was carefully watched. In ten days' time his mind and recollection returned, and he went back to his place.

DR. CHARLES B. PENROSE, of Philadelphia, on August 25th, swam fifteen miles in the Delaware River in five hours and five minutes. His competitor, Mr. Robert Kallston, made the distance in five hours and thirteen minutes.

THE newspapers announced on September 21st that a girl thirteen years old had given birth to triplets in Cincinnati.

JAMES MATTHEWS DUNCAN, M.D., F.R.S.—The following is from the *London Lancet's* tribute to the memory of Matthews Duncan, who died of angina pectoris at Baden-Baden on the 1st of September last:

James Matthews Duncan was born in 1826 in the city of Aberdeen, where his father was engaged in shipping and commerce. He was educated in the grammar school under Dr. Melvin, known as a schoolmaster of great repute. When a mere youth he was entered at Marischal College, and in the course of time he took the degree of M. A. He began his med-

ical studies in the same college, and we have often heard him dilate on the benefit he derived from the instruction of Professor MacGillivray, the well-known author of the "Natural History of Deeside." The love of observing the habits of animals which he imbibed from that naturalist he never lost, and one of his great pleasures, even to the end of his life, was, during the autumn holidays, to watch the birds, the ants, and other animals in the district where he was staying. The latter part of his student life was spent in Edinburgh and Paris, and then he returned to Aberdeen to take his degree of M. D.

It was, however, his residence in Edinburgh that formed the turning point of his life and decided what branch of the profession he was to follow. He became a member of the class of midwifery in the University, then taught by the late Sir James Y. Simpson, and he obtained such high distinction in it that after his graduation he was appointed one of the private assistants to that eminent physician. Simpson was at that time engaged in his world-renowned inquiries into the action of ether, and in the search for some better anesthetic. Duncan assisted him in his work, and tried experiments with various substances. From a statement made in the "Life of Sir Robert Christison," we learn that Duncan was the first person to be rendered insensible by chloroform. Simpson also, in a letter published in his "Memoirs," refers to the night on which Duncan, Keith, and himself tried it simultaneously, and were all "under the table" in a minute or two. All the world knows what has been the result of these experiments.

Shortly afterward Duncan began practice in Edinburgh, and he very soon attained the confidence and friendship of Syme, Christison, Miller, and other leaders of the profession in that city. His activity during his Edinburgh life was untiring. He rapidly built up a large private practice. He became one of the physicians to the Royal Infirmary. He was greatly instrumental in founding the Royal Hospital for Sick Children, and for a time he was one of its physicians. He was elected a Fellow of the Royal College of Physicians, was chosen one of its Council, and during a period when medical

politics ran high in Edinburgh his calm and solid judgment was of the greatest value in the administration of its affairs. He was also a member of the Royal Society of Edinburgh, the Medico-Chirurgical and the Obstetrical societies, and took a frequent part in their proceedings. In 1853 he began a course of lectures on Midwifery in the Extra mural School, which were soon recognized by the students as highly practical, but with their practical recommendations based upon a scientific foundation. Duncan's command both of French and German enabled him to keep himself on a level with all that was good in the professional literature in those languages, and his students got the benefit of his reading and thought.

But amid all the distractions of a large midwifery practice, and of the work of the various public institutions to which he was attached, Duncan found time when in Edinburgh to do an amount of literary work which makes him one of the most prolific authors in his branch of the profession. Moreover, the work which he did was of so high an order that his reputation rapidly grew, so that he became a recognized authority over Europe and America in both the science and practice of obstetrics, and patients were attracted to Edinburgh from all parts to consult him.

On the death of Sir James Simpson in 1870 the profession both at home and abroad looked upon Duncan as the natural person to succeed to the chair of Midwifery, and his candidature was supported by an immense mass of evidence of his fitness. He was, however, much to the surprise of the profession and the public, passed over. Duncan was not a man to "wear his heart upon his sleeve" and to show his feelings openly, but there can be no doubt that he felt keenly the slight, for the bestowal of the chair would have been the proper crown to his professional work. When, therefore, the authorities of St. Bartholomew's Hospital a little time afterward invited him to go to London to act as obstetric physician to the hospital and as lecturer on midwifery in the medical school, his mind was open to accept the call, and Edinburgh lost what London gained—a great physician.

The position which he took in London, and

the impression which he produced there will now be stated in the words of one who first came under his influence as a pupil, and has since been much associated with him in practice.

When Dr. Matthews Duncan came to London he was in his prime, with a European reputation and the character for honor which was early stamped on him. He at once acquired a large practice, which soon became very large. He was trusted by the profession, who sought his help in consultation at once and in increasing numbers, and by the laity, who from the very highest were sure of all that learning, experience, and integrity could guarantee. He was a sort of referee for matters of difficulty in the profession, and was the center and rallying point of all that was best in his department. Some five years before his death he gave up midwifery, except in consultation, only attending a few old patients. This was in accordance with the plan of his life. "I always said I should give up midwifery at sixty," he said, and added that he had done every thing he had hoped for and at the time he intended. How few could say the same. His life was therefore in a sense complete. He was at his zenith, and neither he nor his friends had the grief of seeing his reputation decline. To have given place by simple years to younger men of the right sort would, we are sure, have been nothing but a pleasure to him; he was quite free from jealousy and meanness, and would have regarded such a succession as that of younger brothers or sons.

As an obstetric physician, it may be safely said that the position held by Dr. Matthews Duncan, both in the science and practice of his profession, was second to none, and this not only in his own, but in all countries. The latter half of the nineteenth century is rich in great names, but it can not be said that any of them stand at a higher elevation than his. He was a worthy successor to William Hunter and Denman in England, and to Naegeli in Germany. The amount of his work was immense. There is scarcely a subject in obstetric medicine on which he has not written and left his deep and characteristic mark. As Johnson said of Goldsmith, "*Qui nullum fere scribendi genus non*

tetigit, nullum quod tetigit non ornavit," and in this case the epitaph is strictly true. His method was, in original work, to concentrate his energy for the time on a comparatively small part of a subject, and to avoid compilation or encyclopedic attempts.

In the midst of his great practice Dr. Duncan was often wearied, but never hurried; always ready to attend to the needs and questions and perplexities of those who sought him. His influence on original work in London has been great. Much of the best work in his department was suggested by him to others; very much owed its fertility to his great knowledge of his subject, which enabled him to point out what was known and what needed further work. If it be true, as has sometimes been said, that a great man proves his greatness as much by what he inspires and vivifies in others as by what he does himself, the title to greatness clearly belongs to him on this ground. In this capacity—that of the encourager and stimulator of work of the best kind—he will be sadly missed. May we hope that, in the language of the Georgics slightly altered from the original, "*Pullulet ab radice ista densissima sylva.*" His feelings and methods in his department were distinctly medical, and he persistently and rightly set his face against the idea that all pelvic diseases required an operation. But surgical proceedings, even of the boldest kind, excited his warm interest if he thought that they were likely to prove of ultimate benefit. His position with regard to them was characteristically judicial; restless surgeons were not, he thought, to be too easily condemned; they did what they did at their own risk indeed and their own responsibility; but if they proved their position and justified their boldness by their results, he freely expressed his wonder and admiration, and regarded them as *franc-tireurs*, who might advance practice by their restless experiments. This was a different thing, in his opinion, from wanton recklessness, for which he had no patience. It is astonishing how few things a man who thought and spoke as strongly as he did had to retract, and how this habit of suspending judgment till proof was forthcoming may be read in his works dealing with vexed and doubtful ques-

tions. His instincts, however, which were seldom wrong, led him to speak with great plainness of some departments of practice, such as that of the treatment of minor displacements, even before figures were forthcoming for him who ran to read. His life may be said to have been purely that of a student and practitioner. He had no hobbies; reading was his recreation even in his holidays. He read every thing, remembered all he read, and could quote place and reference with the greatest ease. It was this which, among other things, enabled him to do the immense amount of work which he did. It was not necessary for him to read up a subject; it was there ready in his memory, thought over, digested, and ready for the occasion, only waiting a suitable case to call his energies forth to the supplying of a vacant place or correcting an erroneous idea.

His style was characteristic, strong, and rugged, aiming at clearness rather than elegance, at accuracy rather than effect. This was like the appearance of the man himself. His presence and talk were like the bleak honesty of his native moors. As a physician, patients were sometimes disconcerted by these very qualities, which they did not expect to find in a "ladies' doctor;" but none in trouble failed to find a kind and sympathetic heart beneath his somewhat silent and sententious manner, and he was ever ready to help both with advice and money in time of need. With frivolity and charlatanry he had no patience, and such as possessed these faults found they had met in him with the wrong man. In his relations with patients and his fellow practitioners self-interest never came in. The interests of the patient were paramount.

In appearance Dr. Duncan was of middle height, powerfully built, with an upright, firm carriage. His head was massive; his face was generally impassive, but capable of great expression. His eyes were clear and reflected his moods. His voice, tinged with the accent of his birthplace, was grave and manly. His manner in lecturing was slow, direct, and impressive, and his hearers felt that he was filled with the importance of the subject. He lived in his family, had no clubs, many friends, few great friends, but to such what a great friend he was

PRELIMINARY PROGRAMME OF THE SESSION OF THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION, TO BE HELD IN ATLANTA, GEORGIA, NOVEMBER 11-13, 1890.—Papers to be read (partial list):

The President's Annual Address, George J. Engelmann, M. D., St. Louis, Mo.

How shall we Treat our Cases of Pelvic Inflammation? R. B. Maury, M. D., Memphis, Tenn.

The General and Local Treatment of Gangrenous Diseases and Wounds, Bedford Brown, M. D., Alexandria, Va.

Further Study of the Direct and Reflex Effects of Lacerations of the Female Perineum, J. H. Blanks, M. D., Nashville, Tenn.

Abdominal and Pelvic Surgery in America, Joseph Price, M. D., Philadelphia, Pa.

Intra-Ligamentous Ovarian Cystoma, Cornelius Kollock, M. D., Cheraw, S. C.

Anatomy and Pathology of the Ileo-Cecal Region, Richard Douglas, M. D., Nashville, Tenn.

Wet Antiseptic Dressings in Hand Injuries, Wm. Perrin Nicolson, Atlanta, Ga.

The Best Route to the Bladder in the Male for Disease or for Foreign Bodies, Hunter McGuire, M. D., Richmond, Va.

Supra pubic Cystotomy in a Case of Enlarged Prostate, Wm. H. H. Cobb, M. D., Goldsboro, N. C.

Indications for Cholecystotomy, A. M. Owen, M. D., Evansville, Ind.

Uterine Moles and their Treatment, J. T. Wilson, M. D., Sherman, Texas.

Strictures of the Male Urethra, W. F. Westmoreland, M. D., Atlanta, Ga.

Treatment of Urethral Strictures by Electricity, W. Frank Glenn, M. D., Nashville, Tenn.

The Surgical Treatment of Empyema, J. A. Goggans, M. D., Alexander City, Ala.

Cases in Abdominal Surgery, I. S. Stone, M. D., Lincoln, Va.

Rectal Medication in Pelvic Troubles, W. Hampton Caldwell, Lexington, Ky.

Conservative Surgery in Injuries of the Foot, J. T. Wilson, M. D., Sherman, Texas.

The Management of the Infantile Prepuce, George Ben. Johnston, Richmond, Va.

The Ultimate Results of Trachelorrhaphy, Virgil O. Hardon, Atlanta, Ga.

Further Observations on the Dangers of Operative Delay in Prostatic Troubles, with Personal Experience, R. D. Webb, M. D., Birmingham, Ala.

Clinical History of the Epicycstic Surgical Fistula, with Cases, Jno. D. S. Davis, M. D., Birmingham, Ala.

Foreign Bodies in the Air Passages, with Report of Cases, John E. Pendleton, M. D., Hartford, Ky.

Cholecystotomy, W. E. B. Davis, M. D., Birmingham, Ala.

Two Cases of Laparotomy for Intestinal Obstruction, J. T. Jelks, M. D., Hot Springs, Ark.

Is Gonorrhea Ever a Cause for Pelvic Inflammations? J. R. Buist, M. D., Nashville, Tenn.

(Title of paper not determined), W. O. Roberts, M. D., Louisville, Ky.

(Title of paper not determined), L. S. McMurry, M. D., Louisville, Ky.

(Title of paper not determined), Wm. D. Haggard, M. D., Nashville, Tenn.

(Title of paper not determined), Hunter P. Cooper, M. D., Atlanta, Ga.

GEORGE J. ENGELMANN, M. D.,

President.

IN JAPAN the population is estimated at 40,000,000, and the number of physicians (of all sorts) at 40,321.

THE LANCET announces that the chair of Mental Pathology at the University of Berlin, made vacant by the death of Prof. Westphal, has been accepted by Dr. Grashey, of Munich.

RATTLESNAKE oil is valued at \$2.00 per ounce in Georgia, as a remedy for rheumatism. This will probably lead to its speedy adulteration.

OUTBREAK OF TYPHUS IN GERMANY.—It is reported that typhus fever has broken out in the district of Rybuik, Upper Silesia, and twenty persons are suffering from the malady on the large estate of Modlisszevko, in the province of Posen.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., OCTOBER 25, 1890.

No. 9.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

SOME OF THE ADVANTAGES OF ATTENDING MEDICAL SOCIETIES AND READING MEDICAL JOURNALS.*

BY T. B. GREENLEY, M. D.

In response to a toast, "The Kentucky State Medical Society," at Henderson, the president, Dr. Ouchterlony, remarked that "no one not a member of some society had ever in this or any other State attained any honorable distinction in the profession; that all the creditable work done in the State for thirty years past has been accomplished by members of the State Society."

When we have the history of advances in medicine thus set before us as being accomplished only by members of medical societies we should be induced to become members. There are advantages to be derived by society membership outside of the knowledge we may gain. It brings us together annually, whereby all the amenities of social intercourse and friendship may be cultivated, and thus aid greatly in binding us together as one great brotherhood.

In a paper I read several years ago I had occasion to remark that I believed the fraternal feelings existing between the profession of the two great sections of this country, together with that of the Masonic order, hastened the closure of the late unhappy war. Had we all been medical men or all Masons there would have been no war.

*Read at the meeting of the Mississippi Valley Medical Association, October, 1890.

Then the cultivation of sociability and friendship on the part of the profession is of the utmost importance, both as it respects our interest and pleasure, and there is no more pleasant way of enjoying such sociable intercourse than at the meetings of medical societies. It affords us a short vacation from active work, which is, as a rule, demanded in order to afford us both physical and mental relaxation from overtension. It is a kind of holiday that every hard-worked doctor should take advantage of whenever a favorable opportunity offers. We are thereby enabled to meet old friends and form new acquaintances every year, which frequently result in pleasant and lasting friendship. It has been the good fortune of your humble speaker to make the acquaintance of many medical brethren at meetings of various medical societies, whose friendships form some of the most pleasant episodes of his memory. In fact, if there were no other inducements to be members of medical associations, the social element is of sufficient importance to cause us to become such. What greater boon can men enjoy than that of true and genuine friendship? And when I meet a member of our loved profession I take it for granted he is a gentleman, and grasp his hand as I would that of a friend. There should exist no jealousies among our fraternity, but, on the other hand, with open hearts and hands, let us meet as brothers should meet brothers; for really we are in a certain sense brethren. I am aware it is too often the case that unpleasant feelings are engendered among medical men, especially in small towns where competition is more palpable than it is in cities. This is wrong, and should be discouraged. If our competitors act honorably in their intercourse with us we should not complain. If they violate the code of ethics, the society to which you belong is the place in which to

have the correction made. But I hardly think any member of the profession who is also a member of a medical society will act dishonorably toward his fellow member. There is or should exist a tie of friendship between all members of the profession, and especially between members of a medical society, that binds us together as effectually as that mystic tie which bound David and Jonathan in indissoluble and undying friendship.

But there are other reasons which should induce us to belong to medical societies. It is here that we meet our greatest and best men, and have the opportunity of hearing their words of wisdom. It is here that the experience and observations of our best men are given in detail. It is here that intricate problems in our science are ably discussed and elucidated. Can we well afford to absent ourselves from such a mental feast? I think not. A great deal of knowledge can be acquired by attending medical societies; in fact, they are efficient schools for the instruction of their members; and it may be remarked that no one returns home without a modicum of knowledge more than when he left.

Were it not for medical societies the sanitary condition of the country would receive but little attention. It is through their influence and agency that laws are enacted establishing health boards for the protection of the people by sanitary means. It is through the influence of medical societies that laws are enacted to protect the people against the baleful effects of pretenders and medical charlatanism of all kinds; but much in this particular remains to be accomplished. Public opinion in this respect is to be schooled, and until many of the isms and nonsensical fads of the day, such as Christian science or faith cure, spiritualism with its necromancy, *et id omnia*, are obliterated from public belief, scientific medicine will continue to struggle in behalf of the public welfare.

In connection with medical societies, medical literature serves greatly as an educator of the medical man. To a toast, "The Medical Press," at the late meeting of Kentucky Medical Society at Henderson, Dr. Dudley S. Reynolds made a happy response. It is very evident that a practitioner of medicine who fails

to attend medical societies and to read medical literature soon falls behind his competitors who avail themselves of these advantages. He soon drops into a routine practice, and drags along entirely ignorant of the great advances made in medicine every few years. In fact, in a single decade he is left far in the rear of his more enterprising and studious competitor. One may tell you he has no time to attend medical societies or to read medical journals; that attention to his patients demands all his time. Now it would seem better for his patients and more creditable to himself if he would take time to post himself as to what is best for their welfare. He no doubt has fallen into a certain groove or routine practice, which he pursues, no difference what may be the character of the malady of his patient. Or, on the other hand, he may be an experimenter, which perhaps is more dangerous to his patients than the routine plan.

I saw a prescription, a few years ago, by a medical man in practice with fourteen different ingredients or medicinal agents. We have frequently heard of shot-gun prescriptions, but this might be called a double barreled shot-gun load. Unfortunately many of the ingredients were incompatible with each other, or perhaps it was fortunate that this was the case, as the chemical reactions may have modified the action of some of the more active substances. I am happy, however, to say that this brother was not a member of any medical society, nor was he a reader of medical journals.

Further, to show how a member of the profession may get far in the rear in the way of knowledge, not long since a brother who does not live a hundred miles away advised the friends of a patient who died of phthisis pulmonalis to sue the attendant for malpractice, on the ground that he used creosote in treating the case. He informed the friends that it was never used in the treatment of consumption. This brother, of course, was not a member of a medical society nor a reader of medical journals.

Many years ago I was acquainted with a brother practitioner—in fact, had met him in consultation more than once—who was anxious to bleed a woman who was nearly dead from

metrorrhagia. He contended that she had inflammation of the bowels, and that venesection was the only remedy to save her. In fact, he had made several attempts to bleed her before my arrival, but fortunately missed the vein. His excuse for failure was that his lancet was dull. When I entered the house he informed me that he had me sent for to bleed the patient, as that was all that was necessary to be done. After examining the patient, he was astonished when I told him I would not bleed her, as she was already nearly dead from loss of blood.

This man also claimed to be familiar with veterinary surgery. He claimed to cure foot-ail in sheep by extracting a worm from the foot. His worm, however, proved to be a tendon. Of course you will all say this brother was not a member of a medical society, nor did he read medical journals.

Also, many years ago, I was called to a case of labor with a breech presentation, the child being delivered except the head. The patient had been in this condition over nine hours. The doctor had used all his force to extract the head by pulling on the body, and, becoming disgusted, left the patient in the hands of a couple of midwives to finish the case. They in turn had tried their strength, but also failed, and as a last resort sent for me ten miles distant. I found one midwife present, the other having also retired in disgust. It was an anterior buttock presentation. The efforts at extraction had extended the head so as to lock the occiput behind the symphysis pubis and the chin behind the coccyx. Fortunately the womb was still acting, and, raising the child with one hand, I introduced two fingers behind, and getting them on the upper jaw, in the absence of pain flexed the head, and the next pain expelled it. The midwife was astonished at my getting the head away without pulling on the body.

Now you all can guess that this brother was not a member of a medical society, nor much addicted to reading medical journals. But these things occurred in the old days, and it is greatly to be hoped that much improvement has taken place since among our brothers who are non-members of medical societies.

There are many able members of the profession, men of cultured intellects, who unfortunately are not members of medical societies. But how can we expect them to keep up with their profession unless they are and also read medical journals? The association with medical men tends greatly to stimulate them to greater efforts in their profession, and excites their ambition to keep pace with their *confrères*. The science of medicine is advancing in many particulars, and, as before remarked, he that stands still is soon left in the rear; and any one, no difference how intellectual he may be and how well he may have been educated, both collegiate and medical, must read in order to keep up, or he is liable at any time, when among advanced medical men, to feel abashed at what might be termed his ignorance of late discoveries in his profession.

In speaking of what medical societies have done to benefit the public as well as themselves, I omitted to remark that in my opinion they should discountenance the encouragement of malpractice suits by medical men. I believe nearly all such suits grow out of some word or insinuation of some doctor, who claims to be a friend to the family, that the patient was not treated properly; that he ought to have gotten well, etc. Now this is quite wrong. If we think any mistake has been made in the management of the case we should not speak of it to the patient's friends. A suit of this kind is a two-edged sword, and should be handled carefully, for we are just as liable to be troubled that way as is our neighbor.

Another thing I think is wrong, but it might be righted to some extent by the influence of medical societies if properly exerted. I allude to certain dogmatic assertions made by some members of the profession who are well up on the ladder of fame. It is asserted by some that all wound infection ensues from contact of the surgeon's hands, and that no case of puerperal fever could occur independent of contagion from the accoucheur's contact. These are broad and dogmatic assertions which are calculated to involve both surgeons and obstetricians in malpractice or damage suits. These assertions are made in order to support certain theories, and not with the intention to involve

brother practitioners in trouble; but nevertheless they have that bearing, and might be easily taken advantage of. Setting theories aside, I am well convinced from personal observation that any obstetrician or surgeon may have septicemic patients now and then when he is not at fault, when he has taken every precaution against it.

It is a maxim with me to do or say nothing that will in any way militate against the interest and welfare of my brother practitioner, and I think medical societies should do every thing possible to influence members to observe that rule. Let the watch-words be, "Peace—friendship."

WEST POINT, KY.

HYPNOTISM IN SURGERY.*

BY EMORY LANPHEAR, M.D.

Surgeon to East Side Free Dispensary, Orthopedic Surgeon to University Medical College, etc.

Many patients are not fit subjects for the administration of either chloroform or ether, yet are in a condition demanding surgical interference; for example, a man may have an organic heart lesion contra-indicating the use of chloroform and a chronic nephritis forbidding ether, yet a gangrenous hand demanding an amputation. What can be done? It is possible in many instances to make use of hypnotism.

There are two schools of hypnotism: (1) That of Paris, under the leadership of Charcot; (2) that of Nancy, under Liebault. The first maintains that hypnosis is a pathological condition, to be produced only in hysteria or other neurotic disorder, and hence that only one person in a thousand or more can be placed in the hypnotic state. The second teaches that hypnotic sleep is but a physiological condition; that is, advantage is taken of a peculiar period present in every one when going to sleep, at which time dreams may occur, and when "suggestion" made is fully believed; hence almost any one can be put into the hypnotic state. As a rule, only one in ten can not be hypnotized, and that is because that particular individual can not make himself ab-

solutely passive. Any one can hypnotize a person who is willing, but no one save a physician should do so, and he only for therapeutical purposes, because much harm might be done by unprincipled hypnotizers. No bad physical effects, however, can result in non-hysterical subjects.

With the first school and its dramatic performances, its so-called "thought-transference," its obtaining of drug action by medicines waved through the air at a distance from the patient, its attainment of marvelous therapeutic results from the application of magnets, and other procedures that smatter much of the methods of the "mesmeric" shysters of the past, one should have no patience. Indeed, the experiments carried on in Charcot's clinic upon neurotic subjects are productive of much harm; many of the phenomena produced are either the result of "suggestion" from the operator or of deliberate deception on the part of the subject, and, being within the realm of the incredible, are unfortunate as tending to throw discredit upon a subject of considerable importance to the surgeon as well as to the therapist.

What is hypnotism? If it be allowable to make a diagram of the four attributes of the mind, an explanation is easy:

Will	Intellect or Reason.
Emotions.	Perception.

Now in the process of "going to sleep"—that is, when a person lies down and sinks into a physiological slumber—the first thing to be suspended is the will power; the person wills that he shall sleep; in other words, becomes passive. Next the intellect or reasoning faculty becomes quiescent, and there remains awake the emotions and perception, if such an expression be permissible. Upon disturbances of perception depend all illusions and hallucinations, whether in sane or insane people.

By fear, surprise, or even anger, we may have the higher attributes will and reason temporarily suspended or "paralyzed" while the emotions and perceptions have full play. We are all familiar with the complete suspen-

*Read before the Mississippi Valley Medical Association, October 9, 1890.

sion of the will and of reason in a person "spellbound with fear" or in surprise. Advantage is taken of this by public operators, as Donato and other traveling exhibitors, by making some sudden and surprising action by which the subject is thrown off his balance, when instantly the *hypnotiseur* has control of the emotions and perceptions. But it is a most unsatisfactory method, and should not be adopted by physicians. Going back to the point where the patient in going to sleep has reached the "half-way line," where the will and reason have already become suspended, if a suggestion be now made the subject will believe it and act upon it, provided the suggestion is made at exactly the right moment.

This is exactly what occurs when a patient is hypnotized by the usual method. He is told that he is going to be put to sleep (the word "hypnotism" ought never to be used with the ordinary patient; it is always best to say, "I am going to put you to sleep; make yourself perfectly easy," or something to that effect), and, becoming perfectly passive, the will soon sleeps. He is told to think of one thing, or count, or to look intently at some bright object, and, if he can concentrate his mind upon that, reason or intellect also succumbs, and then control is obtained by the proper "suggestion," and any desired effect may be obtained by playing upon the emotions and perception.*

All persons are not easily hypnotized; at the first trial about one in four will be influenced. It is impossible to say if there is any person who can not be put into the hypnotic state by repeated trials; in fact, it is sometimes necessary to make five or six attempts before even a slight effect is produced; but once begun each succeeding *séance* will give deeper sleep, until at last many who at first or second trial felt nothing will be completely hypnotized.

The method is as follows: The patient is placed in a comfortable chair with the head at rest, the eyes turned from the light; he is told that he is to be put to sleep, and instructed

to fix his attention upon one thing, as going to sleep, counting, etc. At the same time he is made to look fixedly at some object, as the bulb of a fever thermometer, held as far above the eye as necessary to put the muscles of the eye upon a severe strain. Every attempt to look at any other object must be promptly checked by the command, "Look at the pencil," thermometer, or other object. Soon the muscles tire, the eyes begin to look red, the lids to tremble or droop a little; and just here one may make a suggestion to hasten sleep. As soon as an effect is seen it should be maintained. The operator now says, "Your eyes are getting red, your eyelids are drooping, they are getting heavy—so heavy; you are going to sleep—so sleepy now—s-o-o s-l-e-e-p-y," etc., not by any set formula, but in a soothing yet positive way making the suggestion. The pencil is gradually lowered while this is going on; at this the eyelids naturally drop lower, when the operator again says, "Your eyes are closing; you are going to sleep." The pupils alternately dilate and contract, the patient sighs deeply, and the eyes close. The operator now says, "Now you are asleep, sound asleep, your eyelids are shut, they are very heavy—so heavy you can not raise them," and after a number of repetitions until the idea is firmly fixed: "Try it, you can not raise them, you can not do it, you can't do it," this latter very positively. If good judgment has been used as to the time of making this statement the subject will appear to make great effort to open the eyes, but fail. The will power and reason are suspended, and the emotions and perceptions are at the command of the operator.

Hallucinations and illusions may now be produced. For example, a limb may be put in any position, and if the operator hold it there for a moment (unspoken suggestion) the arm will remain in the same position for an incredible length of time. This is not, as Charcot calls it, a cataleptic state; but the limb having been thus placed by the operator, the subject imagines he must so retain it; he is thus acted upon by suggestion. The slightest hint is sufficient, when profoundly hypnotized, to make him do as is wished. Anesthesia may also be induced readily; even at the first sit-

*The explanation of hypnotism may be entirely too metaphorical to suit the materialists of the day. But while we perhaps have distinct "centers" for emotions, will, reason, and perception as we have for speech, motions, etc., yet it is a fact that the mind (whatever that may be) is made up of these four, and that the two superior attributes may become inactive while the two inferior attributes continue to act.

ting the sense of pain may be so greatly abolished that the part acted upon by suggestion may be pinched or cut to a marked degree with no flinching or remembrance of pain afterward. At the second or third *séance* this anesthesia may be made so marked that the arm might be cut off with a hand-saw without the tremor of a muscle on the part of the subject.

Herein lies the applicability of hypnotism in surgery. All operations of minor surgery can be performed, and in susceptible patients even the most severe surgical procedures can be carried out. Dr. Axtel, in his admirable paper (Kansas City Medical Index, 1889), says: "It is possible to use hypnotism even in severe surgical operations. A person must be hypnotized a great many times before anesthesia would be carried to such a degree, yet there is a large number of people on whom it could be done." While many times this is true, it is not always necessary to have repeated sittings before operative measures can be instituted. Thus, in a case of inflammatory talipes operated upon before the Grand River (Mo.) Medical Society recently, I hypnotized the patient, who suffered from aortic regurgitation and a chronic nephritis, and in the hypnotic state he sat as unconcerned as could be while the exceedingly painful manipulations were being carried out. At the most painful period I said to him, "That doesn't hurt you, does it?" His laughing reply was, "No; it feels good!" This man had never been hypnotized.

As an illustration of the extent to which this can be carried, I am permitted by my friend, Prof. A. B. Shaw, of St. Louis, to report one of the most remarkable cases on record. May 15, 1890, at St. Mary's Infirmary, a male patient, aged thirty-eight years, was hypnotized for an operation. He suffered from epilepsy of traumatic origin, presenting among other symptoms Jacksonian convulsions and hemiplegia. On account of other troubles (heart and kidney) it was decided that neither ether nor chloroform would be safe; hence the use of hypnotism. The subject was soon declared ready, and the operation of trephining was done in the presence of Drs. LeGrand Atwood, Superintendent St. Louis Insane Asylum; W. B. Dorsett, Superintendent St. Louis

Female Hospital; H. A. Jones, Physician to City Poor House; W. A. McCandless and R. L. Moore, of St. Mary's Infirmary, and a dozen others. The operation lasted one hour, no chloroform, ether, or other analgesic save hypnotism being used; yet the patient sat fixed and unmovable as if carved from stone. It is the most phenomenal case in the history of surgery.

I have used hypnotism in amputations, and with decided success. I am of the opinion that, as we have just begun to deal with hypnotism in a scientific manner, and still get such marvelous results, the future holds much in store. We have much to expect from the use of hypnotism in surgery.

KANSAS CITY, MO.

THE TORSION OF ARTERIES FOR THE ARREST OF HEMORRHAGE.*

BY J. B. MURDOCH, M. D.

There is no subject of greater interest to the practical surgeon than the arrest of hemorrhage. This remark is equally true, whether the hemorrhage comes from a wound accidentally inflicted or made intentionally by the surgeon's knife. Without the means of stopping the flow of blood from bleeding vessels the surgeon's art would be greatly crippled, and surgical operations where blood-vessels must be divided would be impossible. There is no sight so appalling as a formidable hemorrhage. When a large artery is opened the blood gushes out in an angry stream, the face becomes pale, the color leaves the lips, the respiration becomes sighing, the heart fails to beat, and death closes the scene. Without any knowledge of the circulation or nature of the blood, or of the means by which its flow from a wound could be arrested, what a terrible and mysterious sight it must have been to the early races of men to see one of their number perish from hemorrhage! What, for instance, must have been the sensation of our first parent Adam as he looked upon the wounds of his dead son Abel, with the stain of his blood upon the ground! Surgeons from the earliest ages have shared with the people this dread of hemorrhage, and

* Read at the October meeting of the Mississippi Valley Medical Association.

have ever been striving for the best means for its control. Upon no subject has our profession been more conservative than upon this one, the arrest of arterial hemorrhage.

Since the time of Celsus, notwithstanding the numerous methods which have been proposed for this purpose, but two, the actual cautery and the ligature, have received the indorsement of the profession. But if the profession has been slow to indorse new methods, its confidence once gained has been most unwillingly surrendered. From the time of Archigenes, who practiced in Rome shortly after the time of Celsus, up to the time of Richard Wiseman, Sergeant-Surgeon to King Charles II, the red-hot iron was the sole method employed. Thus this method of checking hemorrhage after amputation not two centuries ago was the same as that used for fifteen hundred years previous. The pertinacity with which surgeons adhered to the use of the actual cautery after Paré's great discovery of the ligature well illustrates the fear in which surgeons stood of hemorrhage. They have used, and had seen their fathers use, the red-hot iron, and, notwithstanding the pain it causes and the interference with primary union, they were unwilling to discard the agent which long usage had taught them was successful.

In 1564 Ambrose Paré published his new discovery, which, to use his own language, "was taught him by the special favor of the sacred Deity." In this publication, as is well known, Paré demonstrated the value of the ligature as a hemostatic. But owing to the extreme fear of hemorrhage, and the criminal neglect of surgeons, it was two hundred years before it was adopted by the profession, and then it came into favor through the influence of Sharpe, one of the surgeons of Guy's Hospital, London, who boldly championed the claims of the ligature to popular confidence. Since this time nothing has dislodged the position which the ligature has held as a hemostatic in the opinion of the profession. The efforts made by Sir James Y. Simpson, of Edinburgh, to substitute acupressure, and the still more recent endeavor of Dr. S. F. Spier, of Brooklyn, to substitute constriction for ligation have most signally failed. The same statement

may also be made in regard to torsion as a means of arresting arterial hemorrhage. It has not received the support of the profession to any great extent, but, unlike the other rivals of the ligature, it has had champions for hundreds of years, and still holds a place as a valuable means of arresting hemorrhage. The subject has received but little attention by modern surgeons. The twisting of an artery to arrest bleeding is of ancient origin. It is spoken of by Celsus. A fact often observed, that an arm or leg may be torn from the body with the loss of only a few drops of blood, no doubt suggested the method. It has been advocated by such surgeons as Amussat, Dieffenbach, Schroeder, and Syme. But the credit of bringing it prominently before the profession and establishing its efficiency is due to Mr. Bryant, the present distinguished surgeon of Guy's Hospital, London. At this hospital the ligature is seldom used, torsion being chiefly relied upon. Mr. Bryant tells us, in the last edition of his *Surgery*, that in two hundred consecutive amputations of the thigh, leg, arm, and forearm all the arteries were twisted, one hundred and ten of them being the femoral artery, and that in no case was there secondary hemorrhage.

Mr. Bryant says: "The physiological arguments in favor of torsion are very great, and the practical advantages seem to be no less. After seven years' experience in its practice, applied to vessels of all sizes, the femoral being the largest, I have had no mishap. I have observed that wounds have united more rapidly and kindly, primary union being the rule. There has been less constitutional disturbance after operation, and consequently less liability to traumatic fever, pyemia, and other complications, such as we are all too familiar with in the practice of surgery. I have had stumps heal in a week, and the patient up in two weeks, without one single drawback, rapid and uninterrupted convalescence following the operation."

Having given this experience of Mr. Bryant, I desire now to give my own as observed at the Western Pennsylvania Hospital, of Pittsburgh. At this hospital torsion is almost exclusively relied upon to check the hemorrhage from

wounded arteries or veins, whether the wound be produced by the surgeon's knife or otherwise. My experience with torsion as a hemostatic, dates back to the year 1872, when I became a member of the hospital staff. My colleagues had, previous to my connection with the hospital staff, been twisting arteries as large as the radial and ulnar. The facility with which this was done, and the fact that the wounds healed kindly and without secondary hemorrhage, induced me to follow their example, at first timidly; but with success came confidence. Having been successful in the amputation of a forearm with no untoward result, I ventured next to twist the brachial after the amputation of an arm; soon after this, the axillary, and then the popliteal, and finally the femoral. And now, for the past eighteen years, torsion for the arrest of hemorrhage after all surgical operations has been the recognized and almost the only method resorted to at this hospital. It is to be regretted that records have not been kept of the number of large arteries which have been twisted to arrest the hemorrhage.

The following is a table showing the number of arteries divided in cases of amputation, where torsion has been resorted to for the arrest of hemorrhage at the Western Pennsylvania Hospital:

Femoral.....	116 times.
Popliteal.....	18 times.
Axillary.....	18 times.
Anterior tibial.....	317 times.
Posterior tibial.....	317 times.
Brachial.....	81 times.
Radial.....	45 times.
Ulnar.....	45 times.

There are two methods by which the torsion may be applied, as is illustrated by the following two cuts.

(1) Limited torsion and (2) free torsion. In the first method two pair of forceps are required. The first pair grasps the vessel at its cut extremity and pulls it from the sheath. It is then seized by the second pair at a point from one half an inch to an inch above the cut extremity of the artery, this second pair being held at right angles to the long axis of the vessel. The first pair is then given three or four sharp turns. By the second method (free

torsion) only one pair of forceps is required. It is the one recommended by Mr. Bryant as not being so likely to injure the external coat of the artery. And this is the method which was adopted in the cases which I have given.



LIMITED TORSION.



FREE TORSION.

A good pair of forceps is required which will hold the end of the artery firmly, that has no lateral motion, and with serrations blunt enough to obviate any laceration or cutting of the parts seized by the blades. The vessel should then be drawn out as in the application of the ligature, and three or four sharp rotations of the forceps made. In large arteries, such as the femoral, the rotation should be repeated till the sense of resistance has ceased. The ends should not be twisted off. In small arteries the number of rotations is of no importance, and their ends may be twisted off or not, as may be preferred. In all of the cases mentioned in the above table torsion of the arteries and veins was the method resorted to to control hemorrhage.

In addition to these cases, of which we have a record, the method of torsion has been the one resorted to in all other surgical operations performed during this period, such as amputations of the female breast, the removal of tumors, the excision of joints, etc. It is within bounds to say that torsion has been resorted to at this hospital in thousands of cases without any mishap. We have had no case of secondary hemorrhage which could fairly be attributed to the method of controlling the hemorrhage.

The advantages of torsion as compared with ligation are :

1. The greater facility with which it can be applied.

I am fully aware that this proposition is disputed, but to those who are familiar with both methods there can be no doubt that torsion is the easier of the two. For the ligation of an artery an assistant is required to seize the vessel and draw it out while the ligature is applied. For torsion, the surgeon requires no assistant. The vessel must be seized by the forceps in either case. In torsion it only requires three or four turns of the forceps to complete the process, which can be accomplished in as many seconds. When a ligature is applied, let the operator be ever so skillful, the thread may break or slip off the vessel; but if neither of these accidents occur, the process can not be accomplished in any thing like the same time.

2. Torsion is a safer method, being less liable to be followed by secondary hemorrhage.

This proposition has been absolutely proven by the experience in the use of torsion at Guy's Hospital, London, and I have now given additional proof by the experience given in this paper.

3. Healing is facilitated because the wound is free from any irritating or foreign body.

This proposition is so plain that it should not require an argument. It was true before the antiseptic treatment of wounds had come into such general use, but is doubly so now. The catgut ligature is no doubt a safer ligature than the silk, for it does not require an ulcerative process for its discharge, and when this ligature has been made thoroughly antiseptic it is no doubt the best. But a ligature rendered thoroughly antiseptic is not always at hand; and those surgeons who have had most experience with the anti-septic treatment of wounds will, I think, be the first to admit that, in spite of their most careful attention, septic germs are often introduced into the wounds by means of the ligature. Even after every precaution in preparation and preservation, the handling of a ligature in its application is a frequent source of infection. But there are other objections to its use. The catgut ligature may dissolve

before the artery has become closed by the natural hemostatic process, or it may unbind. Both of these accidents have been the frequent cause of secondary hemorrhage.

On a recent visit to some of the principal hospitals of New York City, where the operators and assistants possessed the greatest skill, I was not surprised to see that in many instances a ligature broke, and in other cases slipped off the vessels before they were secured. This was to me exceedingly annoying to witness, when I knew that the vessels could have been so easily twisted while they were in the grasp of the forceps. When the question was asked one of the operators, a distinguished surgeon, "Why don't you resort to torsion?" the reply was, "We are afraid to trust it." This answer might have been given with equal force by Richard Wiseman in the seventeenth century, when asked why he did not resort to the ligature instead of the red-hot iron.

In a matter so important as the arrest of arterial hemorrhage, it is proper that surgeons should be conservative, but there is such a thing as pushing conservatism too far. In the torsion of arteries I claim we have an improvement upon ligation; its claims for recognition rest upon physiological arguments which can not be shaken, and its reliability as a hemostatic has been proven by abundant experience.

Before closing this paper, let me say that I have already presented this subject to the profession at St. Louis, before the National Association of Railroad Surgeons, May 2, 1889. I have taken the liberty to quote freely from that address. I now desire to state that I reiterate all the opinions expressed at that time. Increased experience only confirms me in the truth of the statements.

PITTSBURGH, PA.

SODIUM SILICO-FLUORIDE has been stated to be a comparatively harmless yet powerful germicide, if taken in solution, the dose being given at one half to one grain. Recent experiments, however, show that while a 1 to 750 solution does prevent fermentation, it is by no means harmless as a medicine. The immediate results of its administration are an irritated condition of the mucous membrane of the stomach.

Societies.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Sixteenth Annual Meeting, held in Louisville, Ky., October 8, 9, and 10, 1890.

FIRST DAY—MORNING SESSION.

The Association met in Liederkrantz Hall, and was called to order by the president, Dr. J. M. Mathews, of Louisville, at 10 A. M.

Prayer was offered by the Rev. C. J. K. Jones, of Louisville.

Dr. I. N. Bloom, of Louisville, Chairman of the Committee of Arrangements, made his report.

The first paper read was by Dr. Frank Woodbury, of Philadelphia, Pa., entitled *Infectious Dyspepsia and its Rational Treatment by the Antiseptic Method*, in which he said it was proper to state at the outset that our present consideration of the subject is limited to dyspepsia solely as related to the stomach. No reference was attempted or intended to be made to intestinal indigestion, or to the so-called intestinal dyspepsia.

With reference to the pathology of dyspepsia, he considered it at least as much entitled to recognition as a distinct disease, in the present unsettled condition of medical nomenclature, as consumption or chorea. Like them, it is characterized clinically by manifestations of nervous disorder, so that Cullen was not so very far wrong in considering dyspepsia as a neurosis under the class of *adynamie*. Like pulmonary phthisis, also, its most marked symptoms are produced (the author believes) by the absorption of the products of parasitic micro-organisms.

Of late years the science of bacteriology has made wonderful advance, and especially in the department of bacterial parasiticism or infection and its relation to disease. Abelous, a recent investigator of this subject, found sixteen species existing normally in his own stomach, of which two were micrococci, thirteen bacilli, and one vibrio. The presence of saprogenic microbes in the stomach, therefore, being constant and not incompatible with health, it becomes necessary to inquire why fermentation

or putrefaction of the food does not occur after every meal? In other words, how is practical antiseptism obtained by natural process? Three things are to be considered in this connection: (1) the food, (2) the digestive fluids, and (3) the physical conditions attending the act of digestion.

Dr. Woodbury summarized as follows:

Laborious, painful, and imperfect digestion occurring habitually, when not symptomatic of other disease, constitutes dyspepsia; and when accompanied by fermentation of the contents of the stomach and general toxic symptoms, the result of microbial development, it may properly be called infectious dyspepsia.

The disorder is sufficiently prevalent, and gives rise to enough discomfort and actual suffering in its victims not only to deserve our serious consideration, but also to enlist our best therapeutic skill in their behalf. The excessive growth of micro-organisms during digestion is favored by slow movements of the stomach and by defective quantity or quality of the gastric juice. Acid dyspepsia or sour stomach may be due to excessive secretion of hydrochloric acid (rarely), but is generally caused by lactic, acetic, or butyric fermentation, due to the presence of appropriate forms of bacteria in the stomach. The object of treatment of infectious dyspepsia is to prevent the excessive development of micro-organisms during the digestion of food. This is sought to be accomplished (1) by the use of articles of diet which are not in a fermenting condition nor readily fermentible; (2) by adopting such hygienic and tonic measures as will invigorate the bodily powers, and especially bring the gastric juice up to its normal standard of quality and quantity, and increase the muscular power of the stomach; and (3) by local antiseptic treatment, including the administration of drugs which retard fermentation, and especially by lavage or irrigation of the stomach with weak disinfectant solutions or simply recently boiled water.

Dr. John H. Hollister, of Chicago, contributed a paper on *Help and Hindrance to Medical Progress*. He said the possibility of progress was conditioned upon the present imperfection of present attainment; results are

dependent upon our abilities, upon our methods, and upon the obstacles to be overcome. The profession must command a much higher average of native talent, that talent must receive a much higher grade of culture, and the present methods of research on the part of the profession must be greatly modified and improved.

Dr. I. N. Love, of St. Louis, Missouri, in a paper entitled *Coffee*, said that his experience for five or six years past is strongly in favor of taking a cup of strong, black coffee, without cream or sugar, sandwiched in between two glasses of hot water, before rising every morning—at least one hour before breakfast. The various secretions are stimulated, the nervous force is aroused, an hour later a hearty meal is enjoyed, and the day's labor is commenced favorably, no matter how the duties of the day and night preceding may have drawn upon the nervous system. Another cup at four in the afternoon is sufficient to sustain the energies for many hours. In this way the full effect is secured. The stimulant devotes itself strictly to business; none of it is lost, and if the proper diet be taken at the proper time, and the ideal diet for those who make large drafts upon their nervous system and expect to have them honored is hot milk. If the above regimen be followed and accompanied by at least eight hours of sleep out of every twenty-four hours, the capacity for work is almost unlimited.

Dr. George Hulbert, of St. Louis, Missouri, read an interesting paper on *Mechanical Obstruction in Diseases of the Uterus*, and submitted the following conclusions:

1. That in the natural or normal order of things do we find the uterus in form and structure endowed with a power and capacity for the performance of the function of menstruation far in excess of any legitimate demand, to the extent that, with a one fourth inch diameter of canal at the sphincters, the excess equals 7724.8 times the demand, and with a one thirty-second inch diameter the excess equals 120.7 times the requirement.

2. That in the pathological conditions considered as essential for mechanical obstruction do we find that the conversion of force is capable and does so regulate conditions that

the capacity is not abolished, but persistent in an eminent degree, so that in the presence of the normal physiological energy the function is accomplished, save in only one emergency, that of total annihilation of the normal state, namely, atresia.

3. That the phenomena considered as attendant and dependent upon mechanical obstruction are not due to the forcible expulsion of retained fluids through the uterine canal, but are resident and produced within the tissues, and are dependent upon disturbed rhythms of physiological forces evolved through abnormal enervation, muscular action, and circulation.

4. That the demand upon the uterus for the passage of blood clots, membranes, mucous plugs, uterine sounds, sponge tents, uterine dilators, etc., in order that the diagnosis of mechanical obstruction may be made, is not only vicious in the extreme, but irrational, illogical, and unscientific.

5. That the correct and rational interpretation of the testimony offered by symptomatology, pathology, and therapeutics removes mechanical obstruction from the domain of gynecology as a demonstrable fact, save in "atresia uteri."

FIRST DAY—AFTERNOON SESSION.

The Association was called to order at 3 P. M. by First Vice-president Dr. C. H. Early, of Ridgeway, Pa.

Dr. R. Stansbury Sutton, of Pittsburgh, Pa., made (by invitation) some remarks on *The Surgical Treatment of Uterine Fibroids*, and exhibited specimens.

Dr. William Porter, of St. Louis, Missouri, contributed a paper entitled *Professor Flint's Doctrine of the Self-limitation of Phthisis*, in which he said that sometime before his death Professor Flint promulgated the doctrine of the self-limitation of phthisis, and presented it with all his well known power and great ability to the profession. This very interesting proposition was at the time the subject of free debate in various medical societies.

The recent years have been full of the wonderful results of the study of pulmonary disease and bacteriological research, and the possibility of a positive diagnosis has over-

shadowed the equally interesting question of prognosis.

After having carefully examined the facts cited in support of the proposition, Dr. Porter said he had no hesitation in asserting that he finds no sufficient evidence to warrant us in accepting the statement that phthisis is self-limiting, or that the element of self-limitation has a decided influence upon the result in any given case. He did not mean that all cases of phthisis necessarily die from this disease, but he does mean that where phthisis is firmly established there is nothing in the nature of the disease itself that indicates in any stage a fixed boundary, a line of demarkation, as it were, but rather that all its tendencies are progressive and downward.

Dr. Porter drew the following conclusions:

1. That there is no sufficient clinical evidence to warrant us in believing that by self-limitation, as defined by Professor Flint, pulmonary phthisis may end in recovery.

2. The pathology of phthisis is equally opposed to the proposition.

3. Although phthisis is not self limited, yet limitation is possible through "extrinsic influence derived from hygiene and therapeutics."

Dr. A. B. Thrasher, of Cincinnati, Ohio, read a paper on Cough; its Relation to Intra-Nasal Disease. He said cough is a reflex phenomenon due to the irritation of a nerve fiber in the air-tubes, larynx, pharynx, nose, ear, stomach, etc. A normal cough is for the purpose of freeing the air tract from some foreign body. Irritation of the upper part of the trachea and the ventricles of Morgagni most frequently produces cough. An irritation in many other locations may be referred by the sensory centers to this region and thus give rise to cough. Inflammation of the cavernous bodies of the nose or of the adjacent septum has been known to give rise to a distressing cough, and has been mistaken for evidence of tubercular disease. This is more apt to occur in a person of neurotic temperament. The cough due to nasal disease may sometimes be recognized by its metallic ring and the absence of expectoration. It can, as a rule, be provoked at will, by touching the irritable spot in the nose with a silver probe. Dr.

Thrasher recited three cases illustrative of nasal cough from his private practice. In Case 1 there were no subjective symptoms of nasal disease. The cough had been present for three months and was not benefited by the usual cough mixtures. The lower turbinate was found to be hypertrophic, and touching it with a probe provoked violent coughing. The cautery was applied, and in three days the patient ceased to cough.

CASE 2 A young lady had been coughing violently for three months. She referred the irritation to the throat, which had been penciled and sprayed for some time with no relief. Touching the posterior extremities of either lower turbinate produced violent coughing. Treatment as in Case 1 with good result in two months.

CASE 3. Cough had been present six months, and was not benefited by constitutional or local treatment. The seat of the trouble was found to be in the left middle and right lower turbinate. Treatment similar to other cases was followed by cessation of cough within a month.

A paper entitled Therapeutic Uses of Cardiac Sedatives in Inflammation, by Dr. Hobart Amory Hare, of Philadelphia, Pa., was read by title in the absence of the author.

Dr. A. H. Ohmann-Dumesnil, of St. Louis, Missouri, reported a case of rhinothyma with operation.

FIRST DAY—EVENING SESSION.

Dr. John A. Wyeth, of New York City, delivered the public address, taking for his subject "The Medical Student." The large hall was literally packed with people, and the members of the Mississippi Valley Medical Association, a great many of them, who came to hear the lecture, were turned away, the students of the Louisville University and the laity having taken possession of nearly all the seats, thus literally freezing the members out. The address was listened to very attentively, and Dr. Wyeth received applause several times during its delivery.

He said in the course of his remarks that the first or preliminary stage of a medical student's life is his preparatory or academic life; the second his medical college life; the third his

post-graduate or practical life, and it extends from the day he leaves his *alma mater* until usefulness ceases. In the acquirement of a practical training three ways were open, and in order of preference they were :

1. Service as *interne*, preferably for a term of two years in a general hospital.
2. Service in some post graduate institution where all departments of practical medicine are taught by teachers especially trained in their respective branches.
3. Service as assistant to one or more well-qualified practitioners in general medicine.

SECOND DAY—MORNING SESSION.

Dr. Joseph Ransohoff, of Cincinnati, Ohio, read a paper on Chronic Diseases of the Joints.

Dr. H. C. Dalton, of St. Louis, Missouri, contributed a paper entitled Cases of Penetrating Stab Wounds of the Abdomen, Laparotomy, Results. Dr Dalton reported six cases of laparotomy in which there was visceral injury. There was one death and five recoveries.

CASE 1 was a wound of the descending colon and ileum; recovery. E. T., colored, aged sixteen, was admitted to the City Hospital of St. Louis, July 23, 1890. Patient was stabbed two hours previously with a long bladed knife. Wound at free extremity of the twelfth rib; several inches protruded; general condition excellent; pulse, 62; respiration, 23; temperature, 100°. Incision was made in the left linea semi-lunaris; blood and fecal matter were found in the cavity; there were two holes in the descending colon, one in the ileum, which were closed with continued iron-dyed silk sutures. Discharged from hospital eleven days after admission.

CASE 2. Stab wound of liver and intestines; recovery. A. V., aged twenty-one, admitted August 21, 1890, received three stab wounds an hour and a half before admission; one was an inch below the costal border, four inches to the left of median line; three inches of omentum protruded; second was an inch above and two inches to the right of the umbilicus; third in the seventh interspace in the right axillary line. The wound of the jejunum was closed by an interrupted silk suture. Four inches of the seventh rib were resected, the diaphragm

split up three inches, and the wound in the liver closed by one catgut suture. Diaphragmatic and cutaneous wounds closed by continuous catgut suture. Patient's temperature arose to 102° on the second day, after which he recovered rapidly.

Dr. Dalton laid particular stress upon the necessity of following the wounds to the bottom and making ocular inspection of the same, and severely condemned the method of trusting to the introduction of the finger by those who have the *tactus eruditus*. He deprecated depending implicitly upon Senn's hydrogen-gas test on account of its fallibility.

These cases were generally discussed and the doctor highly complimented on his good results.

Dr. M. T. Scott, of Lexington, Kentucky, reported a case of gunshot wound of the intestine, in which there were four perforations by a large bullet, various complications, and complete recovery following laparotomy.

Dr. J. B. Murdoch, of Pittsburgh, Pa., contributed a paper on Torsion of Arteries as a Means for the Arrest of Hemorrhage. (See p. 262.)

Dr. G. Frank Lydston, of Chicago, Illinois, exhibited the skulls of a number of the most notorious criminals known in history, and made some very instructive remarks relative to their peculiarities, shape, size, etc.

SECOND DAY—AFTERNOON SESSION.

Dr. W. P. King, of Kansas City, Missouri, contributed a paper entitled Wiring the Separated Symphysis Pubis, Supplemented by a Novel Pelvic Clamp. He reported a case of separation of the symphysis pubis, with fracture of the interposed fibro-cartilages, fracture of the descending ramus of the pubis, with deep lacerations of the surrounding soft parts, and he referred particularly to the methods resorted to in order to support the pelvis and reinforce the stitches after the pubis had been wired together.

The case suggested the following points :

1. The operation of wiring in a case of separation of the symphysis pubis so completely coaptates the parts that it would seem that scarcely any other method of dealing with this condition can be equal to it.

2. The manner of applying the plaster-of-paris support in the first place, with the use of the water-bag to make an arch under which to dress the wounded parts, is new and original so far as the author knows, and it is a method that may be adopted and easily practiced by any one who knows how to use plaster-of-paris.

3. The steel hip clamp as a permanent support in separation of the pubis is also new, so far as he knew, and is a means that may be adopted with benefit in any case of fracture of the pelvis wherein immobilization of the fractured part will contribute to the comfort of the patient and to the union of the fracture.

Dr. C. H. Hughes, of St. Louis, Missouri, read a very elaborate and profound paper entitled *Psychopathic Sequences of Hereditary Alcoholic Entailment*, which was followed by a paper on *Urea and Serous Membranes*, by Dr. C. S. Bond, of Richmond, Indiana.

Dr. Arch Dixon, of Henderson, Kentucky, in a paper on *Inguinal Colotomy*, said the subject of colotomy, always one of interest, has, during the past decade, demanded much attention from the surgical world. As a measure intended to ward off imminent death, colotomy is called for in all cases of obstruction in the colon, from whatever cause arising. For imperforate anus the operation holds a special position. It is intended to prevent impending death, but it may or may not be regarded as a cure for the disease. In many cases it is the first step in the process of cure. In every infant born with imperforate anus an operation of a local nature is first attempted; if this fails, colotomy by some method is performed to ward off death. Later on an attempt may be made to get the bowel to discharge through the anus. In a few words it may be said that the indications to operate in any given case depend, in the first place, on the chance which the patient has of getting well without operation, and, in the second place, upon the degree of probability with which success follows the operation. To cases of acute obstruction of the sigmoid flexure, or elsewhere, there is practically but one termination—death. No case of volvulus, whether of large or small intestine, has as yet been known to recover under treatment purely medicinal. Here, then,

the indication is clear enough, as clear as the indication to tie a bleeding carotid.

Dr. Dixon reported an interesting case, after which he dwelt exhaustively upon the comparative merits of the two operations, the inguinal and lumbar, citing the most eminent surgical authorities.

Dr. Emory Lanphear, of Kansas City, Missouri, read a paper on *Hypnotism in its Relation to Surgery*, and reported cases. (See p. 260.)

Dr. Theo. Potter, of Indianapolis, Indiana, presented a paper entitled *Certainty in the Diagnosis of Tuberculosis*, in which he said there was no important chronic disease in which our opinions as physicians are more frequently sought, are more weighty, and more subject to present and future criticism than tuberculosis.

The lack of specific curative treatment and of any great tendency to self-limitation after once well under headway, the destruction of tissue, the existence of subtle predisposing as well as exciting elements, the establishment of the vicious circle, including the organs and channels of nutrition, the strange and often persistent delusion of hope, and, finally, the possibility of arrest or real cure; these factors call in a peculiar way for early treatment. But this must depend upon early diagnosis.

In spite of the constant progress from Laennec and Flint, there is no one sign and no combination of signs which are absolute. There is always some uncertainty, and in the early or unusual cases we are and often long remain uncertain. These are the golden weeks and months. But now, with the new light of the present added to the knowledge of the past, we are able to make the diagnosis in the great majority of cases not only early, but with absolute certainty.

The Hypodermic Use of Arsenic. Dr. Harold N. Moyer, of Chicago, Illinois, read a paper on this subject. He said the hypodermic use of Fowler's solution has been recommended by various writers, among others Hammond, who claimed that the dose which could be administered in this way was much greater than could be safely administered by the mouth, Hammond having given as high as fifty drops of Fowler's solution as an initial dose. Again,

he has often carried the amount given by the mouth to the utmost bounds of prudence, till the eyes were puffed and vomiting was almost incessant, and then has continued the arsenic in larger doses by the hypodermic injection, with the result of the cessation of all gastric symptoms and the cure of the disorder.

In a case of chorea, female, aged fourteen, the patient was placed immediately upon the hypodermic, beginning with three minims of the five-per-cent solution, and increasing every second day until, three weeks after beginning treatment, she was receiving thirteen minims of the solution at each injection, with an arsenic equivalent of about thirty-six minims of Fowler's solution. At the ninth injection she was discharged cured.

In the case of a woman who presented herself at the clinic in Rush Medical College with an enormous lymph-adenoma of the side of the neck, after a few deep injections into the glandular mass it began rapidly to diminish; when it had lessened one half the patient ceased attending, and further results could not be noted.

Dr. Moyer's observation is in accord with numerous writers who have reported equally good results from the use of Fowler's solution in various forms of glandular enlargement, passing under the terms lymphoma, lymph-adenoma, Hodgkin's disease.

In conclusion, Dr. Moyer said that the action of arsenic given under the skin, if it have any virtue, must certainly be greater than when taken by the stomach. Thrown into the cellular tissue in the form of a feeble alkaline and readily soluble salt, it is at once absorbed by the blood and carried to all the tissues, administered in this way.

THIRD DAY—MORNING SESSION.

Dr. H. O. Walker, of Detroit, Michigan, read a paper on Perineal Cystotomy *versus* Supra-pubic Cystotomy. He said in the choice of method of operation we should be governed (1) as to its safety; (2) as to its simplicity of performance; (3) as to its rapidity of result; (4) as to its general applicability in the majority of cases. Dr. Walker reported several cases in which he resorted to the perineal method.

The treatment of enlarged prostate with cystitis is equally efficacious by the perineal section and drainage, in furtherance of which he reported a very interesting case.

The perineal method of reaching the bladder is the oldest known to us, although numerous modifications have been made since the hap-hazard "cut on the gripe" for stone was first done. For the removal of stone litholopaxy undoubtedly stands pre-eminent, and can be done upon subjects from three years of age upward; yet there are numerous restrictions to this method, such as stricture of the urethra, large sized stone, an enormous prostate, etc. There can be no question, said the author, when cutting has to be done, that the medio-bilateral method presents the best advantages.

In looking up the literature at his command upon supra-pubic operations since 1883, Dr. Walker finds in the record of between three and four hundred operations an average mortality of thirty per cent. A few operators have had a series of cases ranging from three to ten without a death, the most remarkable record in this respect being that of the distinguished surgeon, Dr. Hunter McGuire, twenty-one operations with but a single death. By the perineal method he finds a mortality of but five, six, and seven per cent, rarely ever going beyond nine per cent.

Dr. Edwin Walker, of Evansville, Indiana, read a paper entitled Two Cases of Tubal Pregnancy. The first case was Mrs. E. S., aged twenty-seven, married four years, sterile. She had a history of uterine and tubal trouble before marriage. Since marriage patient has been an invalid, suffering pain in right groin. Menses always irregular; often missed a month or two. She was unwell June 29, 1890, but in July missed her menstrual period. A few days later she began to suffer from a severe pain in the right groin. August 1st, a sanguineous flow began, and continued to the time of operation. Examination under ether revealed a soft tumor the size of the fist to the right and behind the uterus. August 17th, abdomen was opened, and the right tube, which was very large, found ruptured and a large amount of clotted blood in the pelvis; fetus not found; abdomen irrigated with hot water; glass drain-

age-tube used. Some vomiting and pain, but recovery ensued without a bad symptom. Drain removed on the third and sutures on the twelfth day. The highest temperature was 101.1°.

The author thinks that the present status of the question is, that with such a class of symptoms as presented in this and other cases laparotomy is the safest procedure to adopt.

Dr. William T. Bellfield, of Chicago, Illinois, in a contribution entitled *Resumé of Experience to Date all Over the World in the Various Operations of Cystitis from Prostatic Hypertrophy*, collected one hundred and thirty-three cases of operations upon the hypertrophied prostate, including eight of his own, as follows: Forty-one by perineal incision, mortality nine per cent; eighty-eight by supra-pubic cystotomy, mortality sixteen per cent; four by combined perineal and supra-pubic incision, none fatal.

In fifty-six of these cases the essential facts before and after operation are furnished; they had been the subjects of cystitis, and dependent upon the catheter for periods varying from one to ten years. In all the cystitis was cured; in thirty-eight (two thirds) voluntary urination was restored and continued during the time of observation, six months to two and a half years; in eighteen this function was not recovered.

Fifteen of these fifty-six cases were complicated with stone; excluding these, since it might be objected that the cure resulted rather from the calculus extraction than from the prostatic operation, there remain forty-one cases of uncomplicated prostate operations; of these thirty-two (four fifths) recovered the power of urination; in nine this ability was not recovered.

Dr. Edwin Ricketts, of Cincinnati, Ohio, read a paper on *The Difficulty in Diagnosing a Twisted Ovarian Pedicle in Uterine Myoma*; Dr. David Barrow, of Lexington, Kentucky, one entitled *Three Cases of Intestinal Obstruction, with Remarks*, and Dr. R. R. Kime, of Petersburg, Indiana, one entitled *Extra-Uterine Pregnancy, with report of a case of four years and three months' duration, complicated with entero-uterine fistula*.

THIRD DAY—AFTERNOON SESSION.

Dr. Seaton Norman, of Evansville, Indiana, contributed a paper entitled *Treatment of Organic Stricture of the Male Urethra*, in which he said, In the practice of urethral surgery the operator can not be too emphatically impressed with the fact of the requisite tenderness and sensitiveness of the urethra, and the employment of the slightest amount of force in the introduction of an instrument should be regarded as a relic of barbaric surgery. When commencing the treatment by gradual dilatation, in sensitive patients he always produces local anesthesia by the injection of twenty to thirty minims of a four-per-cent solution of hydrochlorate of cocaine.

Relative to internal urethrotomy, he believes that when it is properly and thoroughly executed, and special care is exercised to maintain the patency of the canal until the wound is entirely healed, that re-contraction is of rare occurrence. Authority is divided in regard to the performance of internal urethrotomy in the bulbous and membranous urethra. Judging from the results obtained by Harrison, the combination of external and internal urethrotomy offers encouragement for the permanent cure of stricture. Dr. Norman has performed external urethrotomy without a guide only three times, and his results as regards the non-recurrence of contraction have been entirely satisfactory. External urethrotomy with a guide is a simple operation, can be with facility and rapidity performed, and promises more satisfactory ultimate results than internal urethrotomy performed in the deep urethra.

Of the various scales that have been proposed for urethral instruments, only the French system, in the opinion of Dr. Norman, is worthy of consideration. To have urethrotomes graduated in millimeters (and all of them with which the author is acquainted are so manufactured) and the sounds corresponding to the English, or any other scale, is, in his judgment, a manifest absurdity.

Dr. L. S. McMurtry, of Louisville, Kentucky, made some impromptu remarks on *The Application of Antiseptic Methods in Midwifery Practice*. He said many practitioners can remember the time when they heard that

the wards of certain hospitals were closed and undergoing renovation because puerperal fever had become epidemic in such institutions. The hospital to-day is the safest place in which a woman can be confined. A few years ago, led by Fordyce Barker, we were taught that puerperal fever was an entity, a distinct fever, dependent upon a separate *materies morbi*, just the same as malarial fever is an entity. To-day we know that puerperal fever so-called is a septic peritonitis, just the same as when a woman becomes infected after abdominal section, or after wounds of the peritoneum from any cause, or from infection of the endometrium and through the fallopian tubes to the peritoneum. A woman after labor is a wounded woman. She has undergone certain physiological processes; she has received certain injuries in the process of labor which opened the lymphatic channels by which she may have become infected from without. There is no such thing (said the speaker) as a woman having a peritonitis unless she is infected from without.

To prevent this infection the vagina should be sterilized, the bed surgically clean, the examining finger clean, the nurse clean, and the atmosphere as approximately aseptic as it is possible to make it, etc.

The following papers were also read: The Advantages of Attending Medical Societies and of Reading Medical Journals, by Dr. T. B. Greenley, of West Point, Ky. (see p. 257); Internal Urethrotomy, with Cases, by Dr. J. V. Prewitt, of West Point, Ky.; Was it Relapsing Fever? by A. D. Barr, M.D., Calamine Springs, Ark.; Some Remarks on the Prevention of Myopia, by Dr. Francis Dowling, of Cincinnati, Ohio.

Officers for 1891: President, Dr. C. H. Hughes, St. Louis, Mo.; First Vice-President, Dr. John H. Hollister, Chicago, Ill.; Second Vice-President, Dr. S. S. Thorn, Toledo, Ohio; Secretary, Dr. E. S. McKee, Cincinnati, Ohio.

Place of next meeting, St. Louis, Missouri, third Wednesday in October, 1891.

THE Dunning Insane Asylum, Illinois, is to be lighted by electricity.

ALLEGHANY COUNTY MEDICAL SOCIETY.

Stated Meeting, September 16, 1890, G. W. Allyn, M. D., President pro tem., in the chair.

Dr. W. C. Bane: On the 13th of February last there was brought to my office, upon the recommendation of Dr. C. B. King, a rather delicate girl whose vision was apparently very defective. Upon my record book I find the following memoranda:

L. R., aged fourteen. Use of eyes for near work causes them to ache, also smarting of the eyelids. Dread of light, or photophobia, during the past three weeks. General health not good. Rather tall for her age, and anemic. Had never menstruated. History of vision always being defective, but worse during the past year. Examination revealed slight congestion of the palpebral conjunctiva. Vision R. and L. E. = $\frac{1}{36}$ or $\frac{1}{144}$. With the ophthalmoscope the fundus of each eye appeared normal.

Office hours being up, I prescribed for the congested conjunctiva some boric acid in aq. menth. pip., with the understanding that she should return in a few days. February 20th, I tested the eyes with the lenses previous and under a mydriatic, with but slight improvement in vision. The patient seemed intelligent, and the eyes appearing to me to be quite normal, I was at a loss to know why the vision did not correspond. In my perplexity I placed in front of the right eye—the left one being shaded—a 4.50 D. cylinder, which at axis 120° enabled her to see $\frac{1}{6}$, Snellen, the card being placed within a meter of her eyes, as beyond that distance she seemed unable to name any of the letters on the test-card. At this point I stopped, and requested that she return in a week or ten days.

March 3, 1890. With the test-card at the proper distance, 20 feet, I commenced where I left off at the last examination, by placing the —cylinder in front of the right eye. At this time she could see $\frac{6}{60}$ or $\frac{20}{60}$. I now gradually reduced the strength of the —cylinder by placing +cylinder in front of it. Gradually the patient's vision came up, until when I had the equal of a plain glass in front of the eye the vision was $\frac{20}{20}$, or normal. I next proceeded to correct the left eye, and in doing so proceeded as with the right eye, and when the lenses equaled a

plane glass she could see $\frac{2}{3}$. Her near vision was likewise quite normal. Without stating to the patient what glass was in front of her eyes, I wrote the following :

R. and L. Plano.

P. D. 60 mm.

Constant.

I now prescribed for her, with the consent of Dr. King, what is familiarly known as Basham's Mixture.

On March 10th the patient returned, eyes well opened, photophobia slight. Vision normal.

April 18th. Patient has continued to take the tonic. General health much improved. Continues to wear the spectacles. Vision normal.

The case was an interesting and instructive one to me. She was so innocent in her manner, and seemingly honest in her answers to my questions, that I did not feel that I ought to say to her that I had reason to doubt her. The expense of the examination was being borne by a friend of hers.

Dr. Allyn: Two years ago a boy but eight years old was brought to my office complaining of trouble in seeing the black board in school. Without a glass before the eye he could not see the test-card, while a simple plane produced normal vision. On removal of the plane his vision disappeared again. This I repeated until satisfied that there was no trouble with his eyes.

Dr. Painter: I have a case with one interesting point. It is of a married woman, aged twenty-seven, who came to me with a history of suppurative tonsillitis. One tonsil went to the formation of an abscess, which broke; the other going through the inflammatory process, but not forming an abscess. A month subsequent to this she came to me complaining of a difficulty of deglutition and impossibility of swallowing liquids; they would be ejected through her nose, and in extinguishing a lamp the expired air would go through her nose, not out of her mouth. She had a marked nasal intonation. The soft palate was abnormally flaccid and insensible to the touch of the probe, as was also a portion of the pharynx. She was treated with electricity (the Faradic current), and was given strychnine, the doses

being increased until the physiological action of the drug was brought about. The only point of interest in the case is that the suppurative form of tonsillitis had this sequel of paralysis. She got well speedily, as probably she would have done without treatment. She was pregnant seven months, and badly needed liquids, of which she was deprived by the paralysis, and rest to her mind, so that active treatment was indicated.

Dr. W. C. Shaw: A child, born the 16th of July. A few days after birth the mother called my attention to a lump in its throat just above the hyoid bone. Some time afterward it increased in size, and I punctured it with a small instrument and clear fluid passed through. I gave some syrup of iodide of iron and phosphate of lime, a few drops every day. In about two weeks she brought the child to me a second time, with this cyst refilled. Last night she brought the child in a third time. I opened the cyst, and instead of a clear fluid got bloody fluid. It might be called a congenital cyst.

A boy eleven years of age was picked up, injured in the collision of a buggy with an electric car. He was bleeding profusely from his nose and his left ear. He had laceration of both ears and a scalp wound. I remarked at the time that the boy might pass for one suffering from a fracture of the base of the skull. Two or three days after there appeared an ecchymosis on the left of the eyelid and extending up over the forehead. I was dressing his ear and made a little pressure over the meatus, and he complained of severe pain in his ear. He was also deaf in the left ear; could not hear a watch tick an inch from his ear. He gradually recovered and did not have serious complications, if he had fracture of the base of the skull. But now, to-day, I called at the house to make my last visit, and his mother spoke of his going down last evening from the steps to the pavement, and as he stepped on the pavement he complained of a jarring in his head again, and of quite a severe pain in that ear. I still think that boy has a fracture of the base of the skull.

While speaking of injuries in the region of the neck, I have lately noticed in cases in this

neighborhood of cutting of the throat that some of the surgeons have performed tracheotomy. I rather think that that is an addition to the injuries, and more likely to do harm than the original trouble. I do not think tracheotomy necessary. One hospital case I remember was a curiosity. Every time any one wanted to see the vocal cords work they would go into the ward; we would remove this man's bandages, turn over his neck, and get him to exercise the vocal organs. We could see the vocal cords working nicely. Now, if that case had occurred in this neighborhood some of the surgeons would have operated upon it and introduced a new danger.

Dr. O'Brien: I am reminded to report a case which occurred in my practice a couple of weeks ago. A child was playing in a new building and had climbed up a partly built stairway and tumbled over to the ground below, a distance of fourteen feet, and fell upon some loose stones that lay there. I found the child had a contusion on the left parietal bone and also at the temple. There was considerable swelling and a subcutaneous bleeding, so that the skin was quite tense over the point of injury, and I was unable to determine whether the skull had been fractured. However, there was complete right hemiplegia. The injury was on the left side of the head. The child could not move the right hand or foot at all; was entirely speechless, and the tongue lay on the right side of the mouth, and if asked to protrude it protruded it to the right. The eye-balls turned to the right. There was no stertorous breathing. Believing that it was probably an injury to the meningeal artery, and hemorrhage, I suggested a consultation, and that Dr. McCann be called. He came in a few hours, and she was by that time slightly improved. She could just move the fingers of the right hand, but could not be induced to take any thing in her hands. The doctor advised waiting, and after two or three days the movements began to return, and the child recovered ultimately complete use of the limbs. An interesting observation I made was, that when it began to speak again it had not forgotten the nouns, as most cases of cerebral injury do. The child asked for what it wanted, and con-

structed a complete sentence the third day after the injury. I think that in the case there had not been much hemorrhage, and in all probability the explanation of it was that the blow received by the parietal bone had simply contused the cerebral substance.

Dr. Ayres: In regard to Dr. Shaw's second case, in which he seems to think the boy suffered fracture of the base of the skull, I should differ with the doctor. It does not appear the symptoms were severe enough to venture an opinion of that kind. The vital centers are most likely affected in fracture of the base, and death is almost certain to result. I would mention here that a series of extremely interesting articles have been recently published in the *Lancet* on fractures of the skull. In Dr. Shaw's case I think some slight hemorrhage was the nature of the trouble. With regard to the case on which Dr. McCann did not operate, it was certainly an interesting one, and shows the importance of going slowly with regard to using instruments for cutting into the brain. I suppose many surgeons would at once have proceeded to operate. I am rather inclined to think there was in this case a little hemorrhage.

Dr. McCann: The case was one in which there was probably a minute hemorrhage, or that condition which is recognized as commotion or contusion of the brain. At the time I saw it the child had paralysis and loss of speech, but still there was nothing which warranted brain proceedings. We therefore deferred operation, with the result the doctor has stated. The bones of a child are so very flexible, breaking with such great difficulty as compared with the bones of an adult, that you can hardly understand how a certain amount of bending or yielding under force might occur without an absolute fracture of the skull, and still lead to contusion of the brain substance, which would bring about a paralytic condition more or less permanent, but which is liable to be gotten rid of in children. The brain is likely to accommodate itself to pressure. In a simple fracture of the skull, even with some depression and without symptoms, I should hesitate about applying the trephine in a child, whereas in an adult I should not hesitate if there

was a marked depression. Of course, in a compound fracture of the skull in a child I should not hesitate resorting to operation and an endeavor to remove the depressed fragments of bone, if necessary, to give outlet to any blood which might be concealed, and should not hesitate to open the dura for the purpose of relieving the pressure. But where you have to deal with a simple fracture with marked symptoms, but without any positive evidence of fracture at a given point, I think it is well to go very slow in operating upon a child. I remember an instance where the parietal bone was driven down upon the brain over the ear, in which the child lay insensible for three days, and which, after elevation and removal of the bone, the cerebral symptoms passed off and the child recovered entirely. I reported to this Society, a few years ago, an instance in which a large portion of the parietal bone was driven down on the right hemisphere of the brain, destroying the right motor center for the arm and for the leg and face, but not destroying the speech center, in which there was, I think, half an ounce of brain substance torn from the brain, with an immense tear in the dura, leaving a cavity into which I passed my little finger to search for fragments of bone in the brain. Without any expectation of recovery I introduced a drainage-tube into the brain and stitched the wound up. Very much to my astonishment my patient recovered, and with power in the leg sufficient to enable him to walk. He has never recovered power in the arm. His speech has not been seriously affected. I can not see that there is any necessity for treating a fracture of the skull as an open wound. The dangers of sepsis are very greatly increased, whereas by closing the wound and draining, thereby giving exit for any fluid which may flow out as a consequence of the damage, certain sources of danger are eliminated; and at the same time you can protect your wound effectually, so that you leave your patient very much as if he suffered from a simple fracture.

SOME unknown disease is said to be killing the oysters in the Chesapeake.

Reviews and Bibliography.

Diseases of the Rectum and Anus: Their Pathology, Diagnosis, and Treatment. By CHARLES D. KELSEY, A. B., M. D., New York. Third edition, re-written and enlarged, with two chromo-lithographs and one hundred and sixty-eight illustrations. 483 pp. New York: William Wood & Co. 1890.

In response to the advances made in recent years in the surgery of the rectum and in intestinal surgery generally, the author has taken advantage of the revision of the work to introduce a number of changes to place this work in correspondence with the latest experience. The work is written in a style of exceptional clearness, and the various subjects are exhaustively treated in a way to prove the writer a master of his subject. A feature of the author's method that greatly commends itself to the thinker and enterprising investigator is the full statement and discussion of faulty methods that have been practiced, with the objections to them, followed by the method approved by the writer. This broad light on the whole subject is calculated to prevent the practitioner from being carried into devices already condemned, and gives him confidence in the course he may choose to pursue.

In many points the author differs radically from Allingham, who has enjoyed so large a sway in rectal diseases. Thus, in the treatment of fistula, instead of the elastic ligature he declares there is but one method that can be thoroughly recommended, and that is the knife, and that the elastic ligature and ecraseur need not be considered except where the incision is so deep that concealed hemorrhage is to be feared and guarded against. Again, as to piles, the author objects to the Allingham operation by ligature that the pain is in many cases too persistent, and to treatment by injection that it is liable to dangerous accidents, but finds in the clamp of Mr. Henry Smith, in connection with the cautery, the ideal method of dealing with most cases of hemorrhoids. He especially condemns Whitehead's operation as giving no better results than the others when successful, and as liable to lead to stricture and other serious after-effects when unsuccessful.

In the matter of reflexes, while recognizing that various rectal troubles may produce reflex troubles elsewhere, he is not disposed to inculcate attempts to alarm patients with the notion that the rectum is the source of all possible woes.

In the treatment of the cancer of the rectum, he contends that it is less amenable to the knife than cancer of most other parts; that the operation is followed by cure in a very small proportion of cases; that the dangers are great and the results unsatisfactory. Still in selected cases he would recommend it. He claims that the weight of experience is fully against excision of the colon, while colotomy often affords a palliative resource of great value.

To all those who are about to purchase a work on diseases of the rectum, and who want a thorough guide where the good ways and the bad ways are fully portrayed, we would suggest the selection of Kelsey.

D. T. S.

A Treatise on Headache and Neuralgia, including Spinal Irritation, and a Disquisition on Normal and Morbid Sleep. By J. LEONARD CORNING, M. A., M. D. With an Appendix, "Eye-Strain, a Cause of Headache," by DAVID WEBSTER, M. D. Illustrated. Second edition. 259 pp. Price, \$2.75. New York: E. B. Treat. London: H. K. Lewis.

The author who may give us a clear and succinct work on headache, with the most approved treatment, even as unsatisfactory as that is, may claim to have supplied a real want. The status of the subject, both as to etiology and treatment, is confessedly unsatisfactory. If Dr. Corning has gone beyond others in this respect, he still has not attained the ideal after which in imagination we have been striving. As to neuralgia, we would much prefer to refer to the classic and exhaustive chapters of Gowers, where one feels that, in addition to gaining medical knowledge, he is also receiving intellectual pabulum in the way of graphic description and choice selection of expressive terms, and where, great as the man is, he loses himself in the subject. In this work, however, the reader can not but be impressed with the feeling that the author's personal exploits are taking too large a share of his attention.

Dr. Corning, in calling attention to the imprisonment of cocaine in localities where its action is needed, although it was merely carrying out what has been practiced with the poison of serpents from dim antiquity, made a real contribution to practical knowledge, and played a card that has brought him good return in the way of recognition. So has much of his other work been creditable. But his method of using cocaine has become his hobby, and reported cures of cases, especially of spinal disease, are given in this work that one can not but think should be relegated to the category of cases that mediums or miracle workers cure, or at best such as disappear under hypnotism.

These are busy days in the world. Every one is looking after his own fame and fortune, and, considering how slow the world is to recognize genius, we are not going to be severe on the author for the style of self-assertion that pervades his work, especially if thereby the many good suggestions in it may be made more useful.

D. T. S.

The Throat and Nose and their Diseases, with one hundred and twenty illustrations in color and two hundred and thirty-five engravings, designed and executed by the author. By LENNOX BROWNE, F. R. C. S. E., Senior Surgeon to the Central London Throat and Ear Hospital, etc. Third edition. Philadelphia: Lea Brothers & Co. 1890.

The second edition of this work received a favorable review in the pages of this journal three years ago. The third edition, which is now before us, can be commended in a similar manner. It is made to contain one hundred more pages than the previous edition. The additions consist chiefly in the part devoted to the nose and nasal surgery. The author becomes more enthusiastic in his advocacy of surgery in nasal diseases, and thinks that the spray and douche should be used only as cleansants. He speaks highly of Curtis' nasal trephines in septum deviations. He says, since witnessing Curtis operate on sixteen cases in his outdoor clinic, he had given up the cautery incision and the punch. It is now clearly established that the successful treatment of nasal diseases depends on a just appreciation of surgical measures. No case of nasal hypertrophy or stenosis was ever cured

by an atomizer or douche, whether the solution used be astringent, antiseptic, or oleaginous.

The operation of intubation, which in the former edition was looked upon with misgiving, receives much praise. He says, "I am bound to confess that my former objections have been almost entirely dissipated." The influence of nasal diseases in the production of pharyngeal and laryngeal diseases is more clearly stated than in the first edition, and nasal disease more highly esteemed, for we notice that the title of the book has been changed from "The Throat and its Diseases" to "The Throat and Nose and their Diseases." The colored illustrations are the work of the author, and are good.

The book makes a most attractive appearance, and this edition will tend to add much to its already well-earned popularity. J. M. R.

Correspondence.

PARIS LETTER.

Dr. Alexander Boggs, Doctor of Medicine of the Faculties of Paris and of London, Surgeon in retirement of the Indian Army, Member of the Royal College of Surgery of England, Officer of the Order of the Medjidié of Turkey, died in Paris, October 5, 1890.

Many Parisians will be surprised to learn that Dr. Boggs was not one of their countrymen. All who knew him knew that in our medical corps there was none more French at heart, more devoted to our country, while they recognized in him those intellectual qualities which we desire to make the characteristic of the national spirit.

Dr. Boggs was born in India, at Madras, his father being on duty at that time in the English army. Though not born in Europe, he was an Englishman by birth.

In 1825, at the age of two years, he lost his father, who died during the Rangoon expedition. The child was taken under the charge of the British Government, and placed, some years later, in the special school provided for the education of the orphans of deceased army officers.

At the age of seventeen he was admitted into the School of Medicine at Madras, from whence he came out three years later with the diploma of *Officier de Santé*.

He served in the medical corps of the Indian-English army until 1854, when he asked for a leave of absence (*un congé*), went to England, and took service in the Crimean war. He was placed in the expedition corps, and was attached to the Turkish contingent organized by the English authorities.

His meritorious services during this campaign brought him to the notice of the Sultan, who caused a military medal to be presented to him.

Returning to England after the war, he attended upon several courses of lectures in the hospitals and schools of the metropolis, thus supplementing the instruction he had received in India. Presenting himself for examination before the Royal College of Surgery of London, he became licentiate in obstetrics in 1856, a branch of medicine which he subsequently practiced with great success without neglecting the practice of general medicine and surgery.

During the same year he re-entered the Indian-English army as surgeon. The year following, during the expedition directed against the revolts of Bengal, Dr. Boggs took a very active part, which gained for him another military medal and an allowance of a considerable sum of money.

Thirst for knowledge was a prominent characteristic of Dr. Boggs, and though he had profited by all the advantages that Madras and London had offered to him, he was possessed of a strong desire to avail himself of the superior facilities for the pursuit of science offered by Paris. He therefore abandoned the military service at the end of the year 1861, and in 1863 came to Paris, where he soon established himself in the practice of medicine, and where he continued to live up to the date of his death.

In 1886 he submitted to the faculty a thesis upon the phlegmasiæ of the matrix, and thereby obtained the title of Doctor of the Faculty of Paris.

Here he grew in popularity as a citizen and

as a physician, and for years did a large practice among the English and French inhabitants of Paris.

Besides the duties of the general practitioner, to which he devoted the greater part of his time, Dr. Boggs always found time for the work of the correspondent, and in this capacity was a constant contributor to several French, English, and American medical journals. His communications were characterized by grace of diction, accuracy of statement, and thoughtful comment.

He has been for ten years member of the French Society of Hygiene, where he displayed a taste for original research; and contributed materially to the advancement of this department of science in France. In his burning zeal to push forward the cause of truth and thus to raise the high-water mark of human knowledge, Dr. Boggs exhibited a quality of mind essentially French, and endeared himself to the savants of the faculty. (*Translated from the French of Mons. P. by A. M. Gillett*).

This lady, who was Dr. Boggs' faithful amanuensis, subjoins the following:

"It gives me pleasure to say of the deceased doctor, after a friendship of five years, that he was always a thorough English gentleman in sentiment, manners, and domestic life. That his naturally mild and amiable disposition should have won the esteem of foreigners is not surprising, for his sympathetic participation in joy or sorrow, with those who were privileged to know him, knew no bounds, and they can only regret with myself the loss of so valued a friend.

"Love of country never forsook him, for, while adopting France as his home, he never spoke of the land of his ancestors without deep emotion. Although English myself, I am inclined to think that he was too good, too sensitive and too spirituelle for any country on earth. Few, if any of the many who knew him, fully appreciated his worth. Surely, I shall never cease to lament him." A. M. G.

PARIS, Oct. 10, 1890.

AN English justice has gotten into trouble by sentencing a man to five days' imprisonment for meningitis, of which he died in prison.

Abstracts and Selections.

CHEMICAL ALTERATIONS OF THE GASTRIC JUICE IN ACUTE AND CHRONIC MALADIES.—

The condition of the gastric juice during febrile states has been studied of late by Wolfram. In the acute pyrexias, which included a case of exanthematic typhus, two of intermittent fever, four of typhoid fever, six of pneumonia, the gastric juice, though containing pepsin, showed not the least trace of hydrochloric acid. In several chronic cases, including one of double fibrinous pleurisy lasting two months, and one of phthisis pulmonalis, the gastric juice was normal. Uffelman and others, on the contrary, claim to have seen cases where the fever was not accompanied with absence of hydrochloric acid in the gastric secretion. (*The Boston Medical and Surgical Journal*.) The alterations in the gastric juice in phthisis have been studied, particularly in Germany, by Hildebrand, Rosenthal, Klemperer, Immermann, and others. According to Hildebrand, the normal acid is wanting when there is continued fever, while it is always present when there is no elevation of temperature. Brieger's observations agree in the main with these results; the acid was wanting in nineteen out of thirty-one cases. At the end of the disease there was present gastritis, with atrophy of the glands. Rosenthal found that, whether in the earlier or later stages, the gastric juice of phthisical patients was generally devoid of free hydrochloric acid. Klemperer distinguishes the initial from the terminal dyspepsia. There is, besides, a pretubercular dyspepsia, in which the secretory activity is normal. In the initial dyspepsia, Klemperer affirms that there is generally hydrochloric hyperacidity. In the final stages he has found the hydrochloric acid deficient or wanting, and the processes of fermentation very much developed. He believes these latter phenomena to be the expression of a subacute or chronic gastritis. In fifteen cases Einhorn found the natural acid wanting in two cases, intermittent in one, and constant in twelve. According to Shetty there is always hydrochloric acid in the gastric juice in phthisis; sometimes this acid is in excess.

To sum up: It will be seen that there is nothing constant relative to the proportion of hydrochloric acid in the gastric juice of phthisical patients; in febrile cases the acid is generally found wanting; in the afebrile it may exist in the normal quantity or even be in excess. Chelmonsky has in several cases noted absence of hydrochloric acid and diminution of pepsin in emphysema; he has frequently found this acid absent in the course of chronic

phthisis. In anemia and chlorosis Riegel observed the proportion of hydrochloric acid to be higher than the normal in three carefully studied cases, and Ritter and Hirsch have claimed similar results from their rather incomplete analyses. Hayem, in cases of chlorosis, has found the digestive operations to be sometimes normal and sometimes profoundly altered; in the latter cases there was deficiency of hydrochloric acid with dilatation of the stomach. In no case did Hayem find hydrochloric excess. Georges has noted hydrochloric deficiency in the anemic patients whose gastric secretions he has examined, while the organic acids existed in large proportion. In a case of grave anemia consecutive to hemorrhages Lyon found absence of hydrochloric acid. In diseases of the heart, according to Hüfler, whether the affection be valvular or muscular, the consecutive circulatory stasis, even when it is little pronounced, suffices to enfeeble or even to destroy the power of the stomach to fabricate acids. Of ten patients, nine had hydrochloric deficiency. Sandberg and Professor Sée have also noticed absence of hydrochloric acid in cardiac affections. According to Einhorn and Ewald the hydrochloric acid only disappears in cardiac patients when there is a catarrhal gastritis. Want of hydrochloric acid in the gastric juice has been found in diabetes, gout, uremia, progressive pernicious anemia, and in Addison's disease. According to Bourget and Georges, there is always enough pepsin, or at least of pepinogenous substance, in the stomach. These writers do not believe in the remedial properties of this ferment when therapeutically administered, and here they indicate a divergence from a considerable clinical experience, which attests to the efficacy of artificial pepsin in many digestive disorders.—*Medical Record*.

THE TRUE NATURE OF SUBUNGUAL EXOSTOSIS OF THE GREAT TOE.—Sometime ago, after careful study of a considerable number of cases of this interesting disease, I came to the conclusion that these tumors differed from other exostoses in several important particulars, and that their peculiarities could only be accounted for by regarding the tumor as due to overgrowth of the rudiment of a supernumerary toe. The reasons that led me to this conclusion were briefly these: (1) The frequency with which the disease affects the great toe, for I have met with only a single instance of it on any other. (2) The extraordinary constancy with which the tumors arise from the tibial side of the terminal phalanx. I have never seen a tumor of this kind connected with any other part of the phalanx. (3) The structure of the

tumor itself, which is not merely that of a cancellous exostosis as it is usually described. The tumor is a real outgrowth from the phalanx, consisting externally of cortex and internally of cancellous tissue, both of which are directly continuous with the corresponding structures of the phalanx. The fibro-cartilaginous matrix which caps the tumor may, I think, be regarded as the remains of the original rudiment. The following considerations tend to support this view of the question and to give the subject greater definition. In the foot most cases of polydactylism occur in connection with the great toe. In these cases there is, as a rule, only a single extra digit, and in the slightest degree of the malformation the affected part is simply bifid at the extremity. The supernumerary part is always placed on the tibial side of the great toe. Cases presenting several supernumerary digits probably belong to a different category; that is to say, they are examples of incomplete duplicity of the whole extremity. The pentadactylous type of pes prevails widely among vertebrates. There are, however, good reasons for believing that this type has been evolved from a more primitive one, possessing at least six digits (hexadactylous); by the more or less complete abortion of a digit, the pre-hallux, from its tibial side. We were, however, unacquainted with any air-breathing vertebrate actually possessing such characters until Marsh published his description of *Sauranodon* in 1880. The anterior and posterior limbs of this creature, which functioned as paddles, possess six complete digits. The rudiment of a sixth toe has been observed on the tibial side of the pes of several five-toed amphibians, in reptiles, and in many mammals. I have a dog with six digits on the extremity of the right forelimb, of which the two inner ones are rudimentary, but have well developed nails. On this subject Wiedersheim remarks: "In human embryos of the second month a distinct cartilage is present on the tibial side of the tarsus, and this probably answers to a small bone on the tibial border of the foot of monotremes, American marsupials, edentates, carnivores, rodents, insectivores, and monkeys. This most likely corresponds to an extra first toe (pre-hallux of Bardeleben)." Thus, as Dr. Cowper has pointed out, there is sufficient evidence to show that pentadactylous vertebrates have more or less completely lost a digit from the tibial side of the pes, and that this lost digit (the pre-hallux) occasionally reappears, with varying degrees of incompleteness, in consequence of reversion. Bardeleben maintains that the ancestors of modern mammals were heptadactylous, and that they have lost a digit from the post-axial as well as from

the pre-axial side of the foot. I think the evidence here adduced is sufficient to warrant me in associating the subungual exostosis of the great toe with the rudiment of this lost prehallux in its least complete form.—*Mr. W. R. Williams, London Lancet.*

URIC ACID IN THE BLOOD.—Sir A. Garrod showed some years ago that during an attack of gout the blood contained appreciable quantities of uric acid. Abeles and Saloman have corroborated these experiments. In the *Deutsche Medicinische Wochenschrift*, No. 23, of this year, Professor von Jaksch, of Prague, whose valuable researches on the blood are well known, publishes an interesting paper on the occurrence of uric acid in the vital stream. He considers mainly two points: (1) Whether uric acid takes a prominent part in the "acid intoxication" described by himself, Peiper, and others. (2) Whether it is only in attacks of gout that uric acid occurs in the blood. The blood was tested by Salkowski's and Ludwig's method, which Jaksch considers to be very accurate. The total number of patients on whom observations were made was one hundred and five. In nine cases of perfectly healthy individuals no trace of uric acid could be detected, neither were there any xanthin derivatives present. In nervous affections, such as tabes, multiple sclerosis, polyneuritis, and tumors of the brain the results were also negative; on the other hand, in such cases the blood frequently contained compounds of xanthin, especially hypo-xanthin. Nine of the one hundred and five cases were patients suffering from enteric fever, but uric acid was never found in the blood; in one case, however, in which the temperature had fallen small quantities were discovered. In a case of irregular intermittent fever the results were analogous; during the febrile attack no uric acid could be detected, but in the intervals it was present. Diseases of the liver, intestinal tract, and stomach only led to "uricacidemia" (as Jaksch calls this condition), when there was profound anemia. Uric acid was found in the blood in cases of heart disease in which there was much cyanosis. In affections of the lungs and pleura it was most frequently detected in emphysema, and when there was pleural exudation. It occurred constantly and in considerable quantities during the febrile stage of pneumonia (five cases). In acute rheumatism it was never found. Fair quantities were present in renal disease—the different forms of nephritis, amyloid degeneration, etc. Considerable amounts were also observed in cases of marked anemia, both primary and secondary. With regard to the second question, therefore, Jaksch comes to the

conclusion that uricacidemia is not pathognomonic of gout; as to the first question, he concluded that uric acid is not often found in febrile "acid intoxication," but that it may be so. It is important to notice that all morbid processes leading to overloading of the blood with carbonic acid also produce this condition, and the greater the cyanosis the more uric acid is found. Therefore it would seem that we must ascribe the presence of uric acid to a disturbance of the interchange of gases in the lungs, such as occurs so largely in pneumonia. How are we to reconcile with this statement the occurrence of uric acid in the blood in nephritis and anemia? To this question Jaksch answers that in both these diseases the red blood corpuscles, whose duty it is to further oxidize uric acid, are deficient. He concludes by making the general statement that uricacidemia is due to disorders of the red blood corpuscles, the vehicles by which oxygen is carried.—*London Lancet.*

PAGET'S DISEASE.—1. Paget's disease is due to parasites of the class of sporozoa, of the order of coccidia or psorosperms.

2. This affection must therefore be classed in the group of cutaneous psorospermoses, proposed by Darier, which already contains the *psorospermose folliculaire végétante*, and in which perhaps should be included the *molluscum contagiosum* of Bateman.

3. It should be considered as a general disease of the skin which has its chief prominence in the mamma, and not as an affection essentially confined to this region.

4. Microscopical examination of scales shows them to be filled with psorosperms, and constitutes an excellent and rapid method of diagnosis.

5. Psorosperms infiltrate the epidermis and its prolongations. They appear in it in various stages of development, the less advanced forms being very difficult to recognize.

6. Parasitic multiplication appears to proceed by dehiscence and by the consecutive dissemination of intra-cystic globular masses, which have probably the significance of pseudonavicella.

7. The epithelial cells have a certain tendency to group themselves by becoming flat around the coccidia, which sometimes have appeared very clearly to be the center of the formation of epidermic globes.

8. Until the discovery of the psorosperms, the various forms which the latter assume had been regarded by authors either as degenerated cells or as cells in process of endogenous transformation.

9. From the histological point of view, it is

primarily an affection of the superficial epithelium.

10. The presence of parasites among the epithelial cells, and even in their interior, causes in the tissues different degrees of inflammation and cellular proliferation.

11. Cancer, which sometimes only appears long after the beginning of the disease, commences in the breast, oftenest in the galactophorous canals, but it may also proceed from the epidermis, from the pilo-sebaceous and sudoriparous glands and their excretory canals.

12. It is a squamous-celled epithelioma, which may be lobular, tubular, or alveolar.

13. Coccidia are found again in various stages of evolution in the lobes and epithelial tubes.

14. The parasites in Paget's disease seem to exercise a direct influence upon the development of epithelioma.

15. The result of the preceding conclusion is that the hypothesis of the parasitic psorospèrmic nature of certain forms of cancer deserves to be taken into consideration.

16. Paget's disease, in the first stages of the lesion, should be treated, not by radical extirpation, but by antiparasitic substances, in accordance with the indications and rules formulated by Darier. The affection in the early stages is curable—a fact which clearly follows from the new pathogenic conception of the disease.—*British Medical Journal*.

A CASE OF NON-TROPICAL CHYLURIA.—The case reported in this paper is intended as a contribution to the literature of chyluria of non-tropical origin. In Winter's *Clinical and Practical Pathology* occurs a "chyluria urine," which is extremely rarely met with except in those who have resided in the tropics. Tyson alludes to only three cases, reported as non-tropical. A. B. Buchanan, of Glasgow, in the recital of a case, found by research three examples recorded as occurring in temperate latitudes.

Miss W., aged twenty-seven, of Scotch descent; a healthy child until she was eleven years old. At this period she began to complain of pain on the outer aspect of the left thigh. The symptoms were like those of sciatica, and she was treated for this disease at intervals until she was sixteen; she was then placed under the care of Dr. Livingstone, of New York. A seton was inserted in the upper portion of the left thigh, and during the operation a milky fluid was seen to escape from the wound in considerable quantity.

At that time the limb was larger than the right; notably was this the case after fatigue, following active exercise. Twenty or more

small prominences, vesicular in character, were located upon the inner and outer aspects of the upper portion of the left thigh, and from them a discharge from day to day occurred. This liquid, upon chemical analysis, proved to be chyle, the quantity variable, but largely augmented after dancing or long walks, and then often amounting to ten or twelve ounces. This, followed by languor and anorexia, compelled the patient to remain in bed for a few days. The above is the history of the case until within a comparatively recent period, when, after an illness of several months' duration (not under my observation), a new phase presented itself. The fluid from the vesicles ceased entirely, and chylous urine since then has been passed in large quantities daily, micturition being impeded at times, owing to the presence of coagula formed in the bladder blocking up the urethra. These were excessive in quantity, and greatly influenced by exercise.

At such times a chill is present, low temperature, pain in the back, mental depression, and extreme restlessness, followed by accelerated pulse and slight increase of temperature. The urine, if allowed to remain in the vessel for a short time, became semi-solid, owing to coagulation, and presented a pinkish appearance, owing to the presence of blood.

I sent a recent specimen to Drs. J. Reeve Jackson and Perdy, of Chicago, and the following was the report: Color, milky; transparency greatly diminished; specific gravity, 1.020; reaction, neutral; amount in twenty-four hours, three to four pounds.

Chemical Examination. Urine contains chyle in large amount; transparency of urine returns after shaking with anhydrous ether. The urine contains albumen, several grains to the liter, and a trace of urea.

Organized Deposit. Consists of granules and some blood corpuscles. No renal casts present.

Unorganized Deposit. A few crystals of triple phosphate present.

I will add that after repeated microscopic examinations of the blood taken at that period in the twenty-four hours, when filaria are usually discovered, I have failed to detect their presence. That there is deeply seated hypertrophy and irritation of the lymphatic system, I have no doubt.

I do not believe the theory, advanced by Dr. Ellison and advocated by Drs. Reid and Bird, that it is renal; the evidence in this case is entirely wanting. I think, with Dr. Carter, that by distension of the delicate lymphatics and lacteals in the lumbar region a rupture has taken place, and a fistulous orifice remains which gives free exit to the chyle or lymph at times of greatest distension. Since the urine

solidifies and takes on a reddish tinge on exposure to the air, or contains clots at the time of expulsion, we may suppose that the communication is placed high up, communicating with the larger lacteals or thoracic duct itself.

Dr. Sausurie, of Charleston, South Carolina, has reported twenty-eight cases quite recently, and the question now presents itself for our consideration, whether those cases indicate that the filaria sanguinis hominis is about to invade a region hitherto exempt.—*Dr. W. H. Myers, Fort Wayne, Ind., ibid.*

GASTRO-HYSTEROPEXY.—M. Pozzi performs hysterorrhaphy after certain modifications introduced by himself. The uterus having been exposed and brought forward until it touches the abdominal wound, a continuous silk suture is passed through the posterior sheath of the rectus close to its cut edge on the left side, the peritoneum and the uterus in the middle line, and hence to the peritoneum and sheath of the rectus upon the right side of the wound. The uterus is transfixed three times in this manner, the needle passing a short distance under the serous coat, further in the uppermost than in the lower points of transfixion. The suture is finally tied and cut short. The more superficial layers of the abdominal wound are sutured separately. M. Pozzi described two cases of retroflexed uterus bound down by adhesion where this operation was performed, in the *Annales de Gynécologie* for June, 1890. The first case was a complete success. Alexander's operation had been already attempted without giving relief. In the second there was suppuration of the lower part of the wound, which the operator attributed to the fact that the silk suture had not been sufficiently boiled. The uterus in each case remained firmly fixed to the parietes. M. Pozzi prefers the continuous suture to the interrupted suture passed outside the integuments, and removed on about the fifteenth day after operation, as practiced by Leopold, who considers that a relatively loose adhesion is sufficient.—*British Medical Journal.*

MENTAL IMPRESSIONS v. OÖPHORECTOMY.—In the course of a lecture upon the treatment of hysteria, Dr. A. Pitres, of Bordeaux (*Rev. Gén. de Clin. et Thérap.*, Sept. 17th), speaking of the surgical measures sometimes advocated and practiced to cure neurotic manifestations, relates the following instructive case as reported by M. Chiarleoni, surgeon to the Cremona Hospital: "A young, healthy woman was in 1878 frightened by a fire. She was attacked by convulsions, and from that time was subject to se-

vere and varied hysterical attacks, abdominal pains, insomnia, intractable vomiting, paraplegia, extreme emaciation, etc. Admitted into the Cremona Hospital, she underwent all kinds of medical treatment. Her condition continually getting worse, she was shown to M. Chiarleoni in 1883. He, after examining her, declared that castration offered the only chance of success. From that time the patient did not cease to loudly demand to be operated upon so that her sufferings might be terminated. Her wishes were not, however, attempted to be complied with until 1887, or nine years after the onset of her hysterical symptoms. This is how they proceeded: The preparations for the operation were made with all due solemnity. The patient, carried into the operating theater, was anesthetized by chloroform. The skin was incised superficially for a length of ten centimeters, and the wound at once closed by five sutures. An iodoform dressing was applied over the wound. From that day the vomiting ceased, sleep returned, and strength revived. The cure was soon complete. She remained well for three months after the pseudo-castration, when M. Chiarleoni published the case."

M. Pitres goes on to remark that such a case proves that the operation itself is not the efficient agent in the cure of these cases. This is brought about by a mental revulsion, just as the harmless *mica panis* has succeeded in less serious instances. He truly says that castration is only legitimate when there are grave lesions of tubes or ovaries demanding surgical intervention. It would be interesting to know whether in this case, as has so often happened after "normal ovariectomy," the neuralgic symptoms reappeared with lapse of time. *London Lancet.*

TYPHOID BACILLI IN URINE.—Dr. Justin Karlinki communicates to a Polish medical journal the results of some observations on the existence of typhoid bacilli in the kidney and urine. In six cases of typhoid fever the urine was taken after death by means of a trocar, and in thirty-eight cases it was drawn during life by a catheter and examined bacteriologically by means of gelatine plate cultures. In the cases where a *post-mortem* examination could be obtained, sections of the kidney were also made, and examined by inoculating gelatine as well as microscopically by Konariëff's process. Of the six cases where the kidneys were obtained, collections of rounded granulation elements were found in five, both in the cortical part and beneath the capsule, a few typhoid bacilli lying among them. In the central portion no bacilli were found. In one case they were

found in the tissue lining the pelvis of the kidney. In the forty four cases in which the urine was examined Eberth's bacilli were found in twenty-one, all these specimens of urine containing also albumen. In cases where the albuminuria was transient the bacilli were not discovered. Sometimes they appeared in the urine much earlier than in the stools; the earliest appearance in the urine being on the third day, while they were never detected in the feces before the ninth day of the disease. They were, moreover, much easier to find in the urine. Dr. Karlinski also made a series of experiments in order to ascertain whether these bacilli develop in albuminous urine. For this purpose he kept tubes of albuminous urine containing them for some time in a thermostat at about the temperature of the body, and examined them daily, with the result that he found the number of colonies increase very rapidly. The vitality of these was preserved also for a long period. Experiments were likewise made with urine containing bile, but it was found that this entirely destroyed the bacilli in about five days.—*Ibid.*

IMPERFORATE ANUS.—The notes of the following case of imperforate anus may be worthy of record, as I believe the successful cases are somewhat uncommon.

On April 23, 1890, a five-weeks' old child, Isabella D., was brought by her mother to the infirmary, with the statement that she had no passage. Mr. Kinsey examined the case, and it was found that the rectum opened on the posterior wall of the vagina, immediately above the junction of mucous membrane and skin. From this orifice, whose long axis was transverse, the feces were freely escaping, and were light yellow and semi-solid. A bent director was passed through the false anus, and made to present at the situation of what should have been the anus, but which was only represented by an elliptical prominence of bluish skin. Mr. Kinsey cut down on the director through about half an inch of tissue, and came upon the bowel, which was opened, and the cut edges sutured to the skin wound by four silver points. No anesthetic was given, and a small rectal bougie was tied in. It was, however, found that the child would not tolerate the constant presence of the tube, so it was passed and kept in for an hour once daily. At first the orifice showed a great tendency to contract, but the need of dilatation lessened, and after about a fortnight the intervals between the passage of a bougie were rapidly increased, till it was found that a month was sufficiently often to interfere. *Faut de mieux* we use Hegar's dilators, a No. 10 passing with comparative ease. The

child's condition has greatly improved from the first. From being a wizened, marasmic morsel, weighing only about five pounds, it has gained flesh, and is now a healthy looking child ten and a half pounds in weight. It appears to have a good sphincter muscle. Very little feces pass *per vaginam*. Mr. Kinsey does not mean to close the vaginal orifice until the parts become larger and less friable. The patient, who is her mother's first and only child, shows no other signs of deformity.—*Mr. R. H. Elliott, ibid.*

THE SALICYLATES IN THE TREATMENT OF PLEURISY.—An esteemed daily contemporary announces to the world that certain Paris physicians have discovered salicylic acid to be a wonderful cure for pleurisy with effusion, and it is kindly advised that American physicians try the drug if "the present epidemic" should continue.

We are pleased to observe the pedagogic interest taken by the daily press in medical matters, but it is highly desirable at the same time that the editorial department should be infused with a little more learning before it begins to teach.

The use of salicylate of soda in the treatment of pleurisy was fully described in the columns of the Medical Record over two years ago (August 25, 1888) by Dr. Joseph Drzewiecki. The method of giving the drug and the results are published in detail. Yet the New York Herald announces this as a new treatment just promulgated in Paris, and editorially commends it to the attention of American physicians!

The Herald sadly needs a competent medical editor if it is to continue its present department of medical news.—*Medical Record.*

CORROSIVE SUBLIMATE SOLUTIONS.—We have occasion so frequently to recommend the use of a solution of corrosive sublimate to destroy the germs of disease that it seems well to give some instructions for its preparation. To make a standard solution, from which the weaker solutions may be made, take four ounces of corrosive sublimate and one pound of sulphate of copper, and dissolve them in one gallon of water.

To make a solution of 1 to 500, add 8 ounces of the above to 1 gallon of water. To make a solution of 1 to 1,000, add 4 ounces of the above to 1 gallon of water. To make a solution of 1 to 2,000, add 2 ounces of the above to one gallon of water. Remember that these solutions, while most effective in the destruction of disease germs, are at the same time highly poisonous.—*Annals of Hygiene.*

The American Practitioner and News

"NEC TENUI PENNÆ."

Vol. X. SATURDAY, OCTOBER 25, 1890. No. 9.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

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MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

We publish in this issue three of the papers and a stenographic report of the proceedings of this society, whose meeting was held recently in this city. The papers are more than average specimens, and make very interesting reading.

Dr. T. B. Greenley, one of our oldest and best contributors, commends with characteristic force of logic the medical journal and the medical society to his brother practitioners, interspersing the points of his argument with many a plea for professional courtesy and brotherly love. Those who are privileged to know this Nestor of country practitioners need not be told that his practice is in unvarying accord with his preaching. Indeed, it is because of this serenity of spirit, which is the crown of a life made beautiful by industry, sincerity, and charity, that Dr. Greenley, at an age when most men are dead or superannuated, is still taking an active part in every enterprise that looks to the welfare of his beloved profession.

In his lonely country rides during these mellow autumn days, as the lovely but sad features of the outer world awaken within him their spiritual correspondences, how fitly do the

words of the venerable Quaker poet describe the temper and the tone of the mind of the aged, beloved physician:

"The airs of spring may never play
Among the ripening corn,
Nor freshness of the flowers of May
Blow through the autumn morn.

"Yet shall the blue-eyed gentian look
Through fringed lids to heaven,
And the pale aster by the brook
Shall see its image given.

"The woods shall wear their robes of praise,
The south wind softly sigh,
And sweet, calm days in golden haze
Melt down the amber sky."

The paper of Dr. Lanphear has more than common interest in that it attempts to explain the inexplicable nature of hypnotism, and shows its proper limitations as applied to medicine and surgery. Byron said of one of Coleridge's treatises on metaphysics:

"Explaining metaphysics to the nation—
I wish he would explain his explanation."

So, we take it, most readers will feel with reference to the author's attempt to make us understand this dark chapter in psychic science. Nevertheless it may be maintained with truth that he knows as much of the nature of hypnotism as does any body else. "The people who walk in this darkness" have not yet "seen the great light." That the doctor is able to show where the hypnotic gift may be of use to humanity will cause all to thank him. If he can tell us how it may be kept from doing harm in the social world he will put humanity in his never-ending debt.

Dr. Murdoch's paper on the control of hemorrhage from large vessels by torsion is a valuable contribution to surgical literature. In it he shows by the record of numerous cases in private and hospital practice how this favorite method of Bryant may be put to the test with unvaryingly successful results.

The 1890 meeting of this representative body of medical men is a sweet fragrance in local professional memory. It will be thrice welcome when it comes again.

Notes and Queries.

AUTHENTICATED CENTENARIANS.—The belief in centenarianism has now pretty well recovered from the shocks it received a few years ago. Those shocks and the resulting skepticism were not a little due to the exaggerated statements made and the insufficient data upon which accounts of extreme age were accepted. It was only to be expected that the narratives respecting Herbert Jenkins, reputed to have died in 1670 at the age of 169; of Old Parr, who is said to have died in 1635 at the age of 152; of the Countess of Desmond at 140, and the like, often repeated, should bring centenarianism into disrepute and throw a doubt upon all who laid claim to it, and should even lead to the question as to the possibility of human life being so far extended. Lady Smith at length came to the rescue, and by an unquestioned prolongation of life and health to 103 made an onslaught on the skeptics, in which she was followed by Miss Hastings at the same age, and Sir Moses Montefiore at 100. Several well authenticated cases have been given by Professor Humphry in his work on *Old Age*, based upon the results of inquiries made by the Collective Investigation Committee of the British Medical Association; and many more might be added; indeed, we are hearing of them every day, and the more correct registration of births and deaths will enable a truer estimate of the proportion of centenarians to the rest of the population to be formed. One of the interesting and cheering results of that investigation is, not only that persons frequently attain to the age of a hundred (women more often than men), but that those who do so are commonly cheerful and happy, without malady, enjoying the evening shade of life and the tranquility that accompanies it, and that they, in most instances, pass away without struggle and without the tedium of long illness. The candle often goes out with scarcely a flicker. The old man is comfortable and happy one day and gone the next. Perhaps he goes to sleep and does not wake, or a slight cold, or indigestion, a little over-fatigue, even a fit of laughing or a fit of choking or coughing shakes out life's flame, and brings

about the dissolution after a manner much to be envied by those who traverse the longer and more painful roads to the same end.

All qualities and tendencies are more or less hereditary, and longevity is well known to be so in a marked degree. It hence follows that there are probably racial predispositions influencing the duration of life. The Irish, as far as evidence at present goes, seem remarkable for a large proportion of centenarians, and the same is stated with regard to natives of certain districts of South America and Jamaica. There are not, however, at present sufficient data to make sure of this, and many other circumstances and surroundings, as climate, mode of life, diet, and occupation must be taken into account.

It is not a little curious that many persons have attained to great age under very insantary conditions—in defiance of them, as it were; and we not infrequently hear the great ages of certain persons in a district, or graven upon the stones in a churchyard, quoted as evidence of the sanitary state of the village or town, and as an argument against the necessity of improvement in that particular, and the expenditure of money upon it, whereas a further investigation may not improbably show that the death-rate by no means accords with this inference. A large proportion may have died young, while some survivors, inured to the evil surroundings, may have attained to great age, thus exemplifying the ability of the human body to adapt itself to varying and even unfavorable conditions. It is, as we know, upon the sensitive and receptive frames of the young that noxious agencies most exert their killing influence, and the immunity of old persons from them is no evidence of their non-existence. A man may live to one hundred years of age in the very house in which he had typhoid fever himself when young, and in which many of his children and grandchildren have since died of it.

One interesting and remarkable observation resulting from Professor Humphry's inquiries is the reparative power after injuries and diseases which is shown by persons at very advanced age, even by centenarians. Though sudden and fatal depression may be, and often

is, produced in them by slight shocks, nevertheless they often tide over greater trials, and make surprising recoveries from injuries and maladies. Their fractures unite often as quickly as in younger persons, and their wounds and ulcers heal even more quickly. It seems as though the nutritive efforts requisite for the work of healing take place more quietly and smoothly, with less of nerve irritation and of that haste which is incompatible with good speed or safe progress; and the recoveries of the aged from congestive, apoplectic, and even paralytic attacks, from bronchitis, pneumonia, erysipelas, and other affections are often most unexpected and surprising. This is probably to be accounted for by the fact that all the organs in those who have attained to great age are usually sound, work well and harmoniously, and have long been accustomed to supply one another's deficiencies, if there be any, like veteran troops, who pull well together and bear reverses under which younger soldiers would usually give way.—*British Med. Journal.*

PAINTED AND DYED SAUSAGES.—The following interesting particulars as to the manufacture of sausages are given in the report of the Dairy Commissioner of New Jersey for the year 1889. Twelve samples of Bologna sausages were examined, with the following result:

The analysis of the Bologna and the skin in which the meat was placed showed that some dye, probably one of the anilines, was used to color the material in order that some defect might be hidden or the article made to appear better than it really was; also that some substance had been applied to the exterior of the sausage similar to varnish. Further analysis revealed the presence of triamidoazo-benzine or Bismarck brown, one of the aniline colors; this was in the meat. The skin or "casing," was coated with a varnish containing shellac. This discovery was the means of arriving at all the details of the process employed. The sausage in question was prepared in the following way: After the meat was chopped, and the sausage-meat thus prepared put into the casings, the sausage was boiled in a bath containing a por-

tion of the following coloring agent: Bismarck brown, 14 parts; garnet red, 2 parts; water, a pint and a half. This gave the sausage a brown color. When this process was complete the sausages were coated with a varnish composed of shellac, resin, oil, and alcohol. In order that the small local manufacturers of sausage might engage in the practice of making dyed sausages, the compositions referred to above were offered for sale through the State, and the staining material was sold under the name of "smokine" or "liquid smoke." The sale of the article was checked by the official action of the inspectors throughout the State. *Ibid.*

THE SHERBET OF THE WEST.—The new Arabian Nights of our European life has still to be written, but the western Haroun Al Raschid might find useful material, both for the romance of the modern harem and for subsequent justiciary proceedings, in the modern sherbet seller, whose proceedings are thus chronicled in the language of the modern analyst: "Recently a young lady was fatally poisoned by drinking some red sherbet purchased from an itinerant confectioner, her companions who had drank some of the same delicacy also being made very sick. An examination of the viscera demonstrated the presence of about a grain of arsenic, and on analyzing the solution of aniline red used to color the sherbet one fifth of a grain of arsenic was found in each ounce."—*Ibid.*

NOTE ON A CASE OF APPARENT POISONING BY INGESTA OF OYSTERS.—On Saturday last, September 6th, twelve persons in Dublin had luncheon consisting of oysters, chicken, and bacon; nine partook of oysters, chicken and bacon, two of the chicken and bacon, and one of oysters only. The person who ate only the oysters, and eight of the nine persons who had eaten oysters and chicken and bacon subsequently suffered severely from nausea, vomiting, diarrhea, and abdominal pain. In some the prostration was very great. In some the symptoms appeared on Saturday night, in the others on Sunday morning. At present (September 10th) the majority are still ill, and

confined to their rooms. The oysters seemed to be quite fresh. There was a great scare about oysters in Dublin last winter; very many persons attributing to their use attacks of typhoid fever, diarrhea, etc. The sale of oysters almost died out in Belfast; it was a common expression that typhoid fever had been caused by eating oysters,

At the meeting of the British Medical Association at Cambridge I read a paper, entitled *Sewage in Oysters*, in which I pointed out that oysters growing in estuaries and other places to which sewage has access must often contain sewage in their juice. Indeed, I found this to be the case with oysters collected near Dublin. *Sir Chas. A. Cameron, Brit. Med. Journal.*

DEATH UNDER CHLOROFORM.—A case of death from chloroform of some interest is reported to have occurred in St. Thomas' Hospital recently. The patient was the subject of pyo-pneumothorax on the right side, which had lasted over a year. Portions of his ribs had on several former occasions been removed under chloroform without the occurrence of any bad symptoms from the anesthetic. The cavity showed signs of contracting, and the discharge was still very profuse. It was decided to explore the wound, and, if possible, reduce the size of the cavity by rib section. The patient was anesthetized, and when sufficient chloroform had been given, before the dressings were removed from the wound, his pupils suddenly dilated, and both heart and respiration ceased almost instantaneously. All efforts to restore him proved unavailing. At the necropsy the heart was found to be healthy, but had been displaced somewhat to the right side. It seems probable that the patient died of cardiac failure, the death being accelerated by the diseased condition of the lungs.—*London Lancet.*

THE PREVENTION OF SYPHILIS.—In the section on hygiene at the recent International Congress an interesting and important debate took place regarding the matter of licensing houses of prostitution. Dr. Thiry, of Brussels, earnestly advocated the licensing system with sanitary inspections twice a week. Dr. Kaposi, of Vienna, took similar grounds. Dr. Thiry

would not allow any prostitute to be licensed under the age of twenty, but Kaposi thought that sixteen years was a sufficiently advanced age.

The views advanced by the above gentlemen were opposed by several others, among them Dr. Drysdale, of London, who asserted that, according to his investigations, there was as much syphilis in Paris, where prostitution is regulated, as in London, where it is not.

A vote of the Section was finally taken, and it was shown that a great majority of the members were opposed to regulation.

This is the view which in the present state of society is most in accord with justice, common sense, and experience. Licensing and sanitary inspection tend to produce secret prostitution; and besides, such methods enforce penalties upon women but not upon men, and are evidently therefore most unjust.—*Medical Record.*

ZINC SULPHITE AS AN ANTISEPTIC.—Dr. F. T. Houston read a paper at the last meeting of the British Medical Association "On a Non-poisonous, Non-irritative Antiseptic Dressing." Calling attention to the poisonous and irritating nature of many of our ordinary antiseptic dressings, he spoke highly of the value of zinc sulphite as a non-poisonous and non-irritative dressing. It was used in the form of an impregnated gauze; this was tinted red with a vegetable dye. By this means it could at once be seen whether the zinc sulphite had undergone any decomposition, for on wetting it the color disappeared if the sulphite had undergone no deteriorating changes.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION will be held in Atlanta, Ga., November 11, 12, and 13, 1890. President, George J. Engelmann, M. D., St. Louis, Mo. Vice-presidents, B. E. Hadra, M. D., Galveston, Texas; Duncan Eve, M. D., Nashville, Tenn. Secretary, W. E. B. Davis, M. D., Birmingham, Ala. An attractive programme has been provided, and a successful meeting is confidently expected. Members of the medical profession are cordially invited to attend this meeting.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., NOVEMBER 8, 1890

No. 10.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

ALBUMINURIA FOLLOWING EXCESSIVE USE OF PARALDEHYDE.

BY H. M. GOODMAN, M. D.

Demonstrator of Bacteriology, Physiology, Microscopical Technology, and Chemistry, University of Louisville.

In reporting the following cases I hope also to call attention to the dangerous habit many druggists have of refilling prescriptions without renewal orders from the doctor. The patient is more often to blame than either the doctor or druggist for this condition of affairs, because, actuated by a desire to save a few dollars, he sometimes places the life of himself or one of the members of his family in jeopardy by the incautious and constant use of dangerous drugs. It is the duty of every physician to caution his patient that a prescription calling for a poisonous drug is not to be refilled without first consulting him, and it is more plainly the duty of every pharmacist to refuse to refill any prescription, no matter how trivial, unless so directed by the attending physician.

I have known patients to save the boxes and bottles that I had used in the treatment of certain affections, and when, as they supposed, a similar disease occurred in another member of their own or a neighbor's family, send them to the same drug store, perhaps years after, to have them refilled. Three times, under the above circumstances, have I been called in to find the patient moribund and suffering from a very different disease than supposed. Surely a man who would thus willingly or foolishly sacrifice a member of his family deserves all he gets,

and the druggist who refills the prescriptions is *particeps criminis*. By the exercise of caution the physician may relieve himself of blame.

In May, 1887, I was called to see Mrs. X, aged fifty-five. She had been considerably worried over family troubles, and, being unable to sleep, had two months previously consulted a homeopath in her neighborhood. He had prescribed elixir of paraldehyde. She had continued taking the drug in gradually increasing doses, and when I saw her had been taking from sixteen to eighteen ounces in the twenty-four hours. She was extremely morose, irritable, and apprehensive. The tongue was dry and coated with a brown fur, breath foul, lips cracked, and skin dry and parched. The teeth were discolored and the hair had become very brittle. Her eyesight was very much affected; she was troubled with diplopia, and could not see the clock across the room. Her appetite was gone and she was much emaciated. The examination of the urine made on the second day showed one fourth of one per cent of albumen, diminished urea, and absence of casts. Subsequent examination, made at intervals of every three days, continued to show the same condition for six weeks, after which it gradually disappeared, and at the end of three months the urine had become normal. Her general condition improved and she entirely regained her health. Although I have made examinations of her urine every two months since then, I have never detected even a trace of albumen. Knowing her health to have been good, and having had occasion to examine her urine in 1885 and 1886, and also early in the year 1887, before she took the paraldehyde, I am satisfied that the condition of the kidneys was due directly to this cause, and had the drug not been discontinued, it would have terminated in a confirmed albuminuria.

I am indebted to Dr. S. Brzozowski, of this city, for the history of the following case: About a year ago the doctor was called to see a gentleman who was suffering from insomnia. He was a man of family, and his history showed no evidence of any former acute or chronic trouble. Becoming very much worried over business matters, he was finally unable to sleep at night, and had consulted an irregular, who gave him elixir of paraldehyde. When seen by Dr. Brzozowski he was taking two ounces of the drug every hour or two; in fact, had to be watched to prevent him from taking more. His nervous system was completely shattered, eyesight affected, tongue dry and parched, hair brittle, and all the secretions very much diminished. There had developed over the entire body a vesicular eruption, and these when opened emitted a fetid odor mingled with the odor of aldehyde. Examination of the urine showed a large percentage of albumen; but as no microscopic examination was made I do not know that casts were present. Being unable to break him of the terrible habit, the patient died shortly afterward, and his death was attributable, so Dr. Brzozowski thinks, to the poisonous effects of the paraldehyde.

Paraldehyde ($C_2H_4O_3$) is produced by the action of hydrochloric or sulphuric acids on aldehyde. It is a colorless liquid, boiling at $124^\circ C.$, and of specific gravity 0.9943. It dissolves in about twelve volumes of water, and is more soluble in cold than in warm water. When distilled with sulphuric acid, ordinary aldehyde is generated. Vapor of aldehyde, when inhaled in concentrated form, produces asphyxia, even in comparatively small quantities. When diluted with air it is said to act as an anesthetic. Taken internally, it causes sudden and deep intoxication, and to its presence do the first products of distillation of spirits of inferior quality owe their rapid deleterious action.

The physiological action of paraldehyde was first studied by Prof. Cervello, of Palermo, in the laboratory of experimental pharmacology at Strasburg, and it was at first supposed to be a perfect and harmless hypnotic. It was said to be particularly valuable in mania melancholia and other nervous affections, as well as

in the sleeplessness that accompanies acute bronchial catarrh, pneumonia, and heart disease. Later experiments show that paraldehyde produces sleep in frogs and also in mammals, with complete muscular relaxation and loss of sensibility. The heart is not affected except late in the poisoning, and death results from paralysis of the respiratory center. It has a well marked action on the kidneys, greatly increasing the flow of urine. In animals living chiefly upon a vegetable diet it attacks particularly the red blood corpuscles. Under its reducing action the blood becomes as seriously affected by methemoglobin-anemia as by chlorate of potassium, pyrogallie acid, or nitrobenzol. In addition it has a poisonous effect upon the nerve centers. When given to man in doses of a dram it usually produces sleep closely resembling the natural sleep. It is claimed that its use is not attended by after effects, but very often the use of paraldehyde is followed by severe gastric irritation, and more rarely severe vaso-motor disturbance.

Dr. J. G. Kiernan has found the prolonged use of paraldehyde to be followed by the same intractable nasal ulcers, skin eruptions, and other evidences of disturbance of nutrition that are seen after the similar use of chloral. It closely resembles chloral in physiological and therapeutic action, but is not so depressing to the heart as that agent. It has little or no control over pain. From observations of Prof. Cervello (*Arch. Scie. Med.*, Vol. 2, No. 1) it seems to be antagonistic to strychnine, thirty-seven and a half grains completely antagonizing one fifteenth of a grain of nitrate of strychnine. The converse action does not seem to exist, for strychnine has no influence on paraldehyde narcosis. It is also said to antidote brucine, thebaine, and picrotoxin.

My experience with the drug shows that, aside from its objectionable taste and the odor it imparts to the breath, it may be productive of much injury to the system. I have seen two cases in which the patients had acquired what might be called the "paraldehyde habit." It certainly does not produce a natural sleep, and only too often sets up gastric irritation, which at times proves troublesome. Its power to antidote poisoning by strychnine is exceedingly

doubtful. Its curative properties in mania a potu are on a par with its other qualities. You frequently run the risk of curing the patients of one habit at the risk of their acquiring another which is by far more disastrous in its consequences. It is my honest conviction that paraldehyde should never be used in any case that requires its continuous administration, and, having better hypnotics at our disposal, its use, even in acute cases, to produce sleep is of doubtful propriety.

LOUISVILLE.

SUICIDE.

BY JAMES WEIR, JR., M. D.

In ancient times certain people were educated and taught to believe that the act of suicide under certain circumstances was highly commendable and praiseworthy. Especially was this so among the Latins and the Greeks. It was a result of their customs, manners, and teachings. That suicide is a result of civilization there can be no doubt. Among savage and uncivilized races it is unknown. Only when a race begins to elevate itself and take on a higher view of morality, when new rules and new laws, new customs and innovations, tending to place individuals in a state of comparison arise, does suicide make its appearance. The untutored savage, living in a state of semi-communism, is untroubled by the jealousies and heart-burnings of his civilized conqueror. He lives in the to-day, and allows the to-morrow to take care of itself. Devoid of ambition, a mere animal, sensual and indolent, he cares merely for the gratification of physical desires. The mental attributes of a civilized being are in him wanting. He eats, he sleeps, he dies. His life is as the day. Born in the morning only to die at eventide, he exists as do the beasts of the field. In the sense of our meaning he does not live. The mind of the savage is not devoid of the finer shades of mental emotions found in civilized man. They are there, and need only the plowshare of civilization to bring them to the surface. I believe that now, in the present age, all suicides are due to mental aberration. It may be the result of a momentary and sudden loss of mental equipoise, or the final and fatal ending of a premeditated

desire carried through days, weeks, and months, and even years. Man stands so close to the borderland of insanity that when he takes an introspective view of his physical being he can almost conjure up the phantasms, idiosyncrasies, and mental ghosts of his insane personality and compare it with that of his sane.

We see a man blessed with every thing that makes life enjoyable, genial, gay, with the ready smile and kind word for every one, suddenly, in a moment, pass forever out into the unknown, self-killed, a victim of his own creation. We stand amazed. Why did he do it? We can find nothing in his past or present condition to warrant such an action. He was the victim of momentary aberration, perhaps, or deep down in his heart he had, buried and hidden probably from himself, the desire for self-slaughter, when "a physical pain, an unexpected impression, a moral affection, a recollection, an indiscreet proposition" unearthed this desire, and he at once committed the deed. A person who resolves to kill himself in a particular manner will wait for months until circumstances favor his preconceived method. If he fails in his attempt, however, he will not try the same way again. For instance, he who tries to suicide by drowning, and fails, will try some other plan. There is an exception to this rule. The suicidal maniac, one who is insane on all subjects, will try the same method over and over again until he succeeds. A morbid idea in a would-be suicide is sometimes associated with a particular kind of death. If he is removed from surroundings suggesting this manner of perpetrating the act, he very frequently loses his desire to commit self-slaughter. There are epidemics of suicide. Let the papers chronicle some peculiar method of suicide selected by some unfortunate, and others will immediately follow his example.

Sir Charles Bell went into a barber shop for a shave. While sitting in the chair he related to the barber the case of a man who had just been brought into the hospital. He had attempted suicide by cutting his throat, but owing to anatomical ignorance had failed. He explained to the barber the anatomy of the neck, where all the large arteries, veins, etc., were, and told him where to cut so as to be

successful. The barber excused himself for a moment, but, not coming back, Sir Charles went to look for him. He found him in the back yard with his throat cut *secundum artem*. Wynter relates some curious instances of epidemics. During this century there was an example at Mansfield, England. In 1793, at Versailles, one thousand three hundred people killed themselves. A quarter of a century ago one of these extraordinary outbreaks took place in the Hôtel des Invalides. One invalid hung himself on a certain cross-bar in this institution, and in two weeks' time five others had followed his example. Where there is hereditary suicidal mania, sometimes whole families will kill themselves. They will live along as other people until they arrive at a certain age, when suddenly the desire is awakened and they make way with themselves at their earliest opportunity. I have mentioned before that some suicides seek death after very peculiar methods. Here are some instances which have come under my own observation.

A woman stuffed her handkerchief down her throat and was almost moribund when discovered. Another woman locked herself in a kitchen, built a fire in a large range, stripped herself naked, and as soon as the stove was red hot cast herself bodily upon it. The smell of her burning flesh led to the bursting in of the door by some of the family, who discovered her on the stove, perfectly conscious and clasping it tightly with her arms and legs. A man tied himself to one of the buckets in the wheel of a steamer, which was then lying at the wharf. Soon after the boat pushed off the man was discovered. He was untied and vigorous treatment brought him out all right. Another man swallowed several pounds of quicksilver and died in great agony. One of the most remarkable cases I ever heard of occurred in the practice of Dr. Borgen, of St. Louis. The would-be suicide carried to the garret of his house a large fragment of stone weighing one hundred and twenty-three pounds. He next procured a well-tarred rope, and throwing one end over a rafter and tying the other end to the stone, hoisted it some five or six feet into the air. He then piled a lot of rags and kindling wood, saturated with coal oil, on the

upper surface of the rock, completely surrounding the rope. He set fire to the rags and kindling wood, and then cast himself on the floor with his head immediately beneath the suspended stone. His idea was, that as soon as the rope burned through the stone would drop and crush his head. He was discovered and rescued before this occurred.

Dr. Bergiarri relates the following remarkable case: "This man had determined to imitate the crucifixion, and for this purpose deliberately set about making a cross and providing all the adjuncts of that terrible scene. He perceived that it would be difficult to nail himself firmly to the cross, and therefore made a net which he fastened over it, securing it at the bottom of the upright beam, a little below the bracket he had placed for his feet and at the end of the two arms. The whole apparatus was tied by two ropes, one from the net and the other from the place where the beams intersected each other. These ropes were fastened to the bar above the window, and were just sufficiently long to allow the cross to lie horizontally upon the floor of the apartment. Having finished these preparations, he put on his crown of thorns, some of which entered his forehead; then, having stripped himself naked, he girded his loins with a white handkerchief. He then introduced himself into the net, and, seating himself on the cross, drove a nail through the palm of his right hand by striking its head upon the foot until the point appeared on the other side. He now placed his feet on the bracket prepared for them, and with a mallet drove a nail completely through them both, entering a hole he had previously made to receive it, and fastened them to the wood. He next fastened himself to the cross by a piece of cord round his waist, and wounded himself in the side with a knife, the knife representing the spear of the Passion. All of this he accomplished in the interior of his apartment, but it was now necessary to show himself in public. To accomplish this, he had placed the foot of the cross upon the window sill, which was very low, and, by pressing his fingers against the floor, gradually drew himself forward until the foot of the cross, overbalancing the head, the whole machine tilted out of the window and

hung by the two ropes, which were fastened to the beam. He then, by way of finishing, nailed his right hand to the arm of the cross, but could not succeed in fixing the left, although the nail by which it was to have been fixed was driven through it, and half of it came out on the other side."

I have asserted my belief that all suicides are mentally aberrant. We know that monomaniacs are sane on every subject save one. Just so with suicides. Their mental equipoise would be perfect but for the desire to make way with themselves. They are in a sense monomaniacs, consequently insane. A fact frequently met with firmly establishes the correctness of this conclusion. Many a would-be suicide is brought to a realization of the act he is attempting to commit by the pain or discomfort incident to the endeavor. He then bitterly regrets his unfortunate predicament, and will use every means in his power to avert the dreadful consequences of his act. Unconscious cerebration also has undoubtedly hurried many souls into eternity. I was called to see a gentleman who had attempted suicide by slaying the radial artery at the wrist. I found him holding a compress firmly on the severed vessel and greatly alarmed. He swore to me that he was totally unconscious how he had come to do the deed, and did not know that he had cut himself till he felt the pain of the wound.

Under no circumstances will a sane man commit suicide. No amount of physical pain or mental anguish will cause him to loosen the bonds of life if he remains sane. Mental anguish and physical pain cause many suicides, but they do this by their morbid action on the brain. They first make mad the unfortunates who destroy themselves. This paper does not deal with the suicide of children. It has reference to the suicide of adults alone. Men commit suicide at or between the ages of thirty or forty years. Women commence a little earlier. Young men most frequently commit suicide by hanging or drowning; middle aged men through the instrumentality of fire-arms or the knife; old men by drowning or poison. Women generally use poison. Suicides occur more frequently in winter than in summer, and the month of November seems to be selected

oftener than any other month. To detail the numerous causes which incite suicide will be an impossibility in the short space of a magazine article. Briefly stated, they are caused by mental and physical discomfort, hereditary and suicidal mania, sudden mental aberration, unconscious cerebration, cerebral disease, and intemperance in any thing.

Victims of suicidal mania are often cured by proper treatment. There can be formulated no fixed plan for the treatment of patients with suicidal tendencies. The physician must be governed by the surroundings and peculiarities of each individual case. A violent emesis followed by brisk purgation often effects an immediate and permanent cure. If possible, always remove the cause which incites the morbid idea.

OWENSBORO, KY.

Reviews and Bibliography.

The Science and Art of Obstetrics. By THEOPHILUS PARVIN, M.D., LL.D. Second edition, revised and enlarged. With two hundred and thirty-nine wood-cuts and a colored plate. 704 pp. Price cloth, \$4.25, sheep, \$5.25. Philadelphia. Lea Brothers & Company. 1890.

The purpose for which a book is written must be the guide in its preparation, and its adaptability to this purpose must be taken as the measure of its value.

From time to time, in various lands, text-books of obstetrics have been produced, each pre-eminent in its day as foremost in exposition of the science and art; but, as new principles were established and new facts discovered, each was left behind to be replaced by others that embraced the latest knowledge. We have now reached a point, however, where even knowledge of great value in obstetric science has become too extensive to be embraced in a book for the use of beginners in this important branch. The production of text books for the use of students has therefore become a separate aim on the part of authors.

A work for students should in the first place embrace all the important truths in the science; it should explain every procedure in the

simplest and clearest way with the fewest possible surplus words. It is safe to say that the work now under revision is in these respects not surpassed by any work before the profession.

In every page the broad culture, the deep learning, and the strong enthusiasm of the author are apparent. He is especially happy in laying the groundwork for the discussion of each new theme by his clear and thorough definition of terms.

The charm of style is particularly striking, and brings us back to the days of Meigs, when one might lay down the latest novel and take up his Ob-tetrics for recreation.

We will now pass in detail some particular features, omitting doctrines and procedures that are firmly established, and consider only matters that are still more or less unsettled.

The author has followed the wise course now growing into favor with obstetricians and given no more of embryology than is necessary to the proper understanding of matters connected with this particular department.

In his discussion of the extrusion of the polar globules, the gate is opened for considering whether there is not even in the human race a remnant of the power of parthenogenesis. In considering the frequency of the occurrence of dermoid cysts in the ovary, what other explanation so much approves itself as that this is due to a faulty effort at parthenogenesis?

The cause of menstruation receives extended discussion, the author, however, giving the various theories that have been propounded by others rather than bringing forward any of his own. Menstruation does indeed seem one of the marvels of baffled philosophy. Neither in women nor in any of the animals down to the lowest order do its advantages appear. Yet so important a function ought to show some *raison d'être* in the benefits it may confer on the race.

One might find some sort of restful hypothesis in the supposition that a periodic congestion has, in the evolution of the animal kingdom, been the most favorable condition for the nourishment of the young, and that the erect posture assumed in the human race has caused a congestion and diapedesis amounting to hemorrhage; and thus bloody menstruation, like

hemorrhoids, might be one of the penalties paid by human beings for assuming the erect position.

A new explanation is given of the modification of the female organism by the male, by which subsequent offspring is made to resemble the first husband, as is especially known to occur in some of the lower animals. This, the author thinks, may be due to the influence of spermatozooids that were left over after fecundation in the earlier conceptions.

He reproduces at length the speculation of various authors as to the causes of the differences in sex, but gives as his own conclusion that it is one of nature's secrets that will never be revealed.

We could have hoped the author's convictions would have justified him in pronouncing "obsolete" on all teaching that the fetus gets any nourishment from the amniotic fluid; but his views on this point are not positive, and one might infer that he is willing to allow that the fetus derives some nourishment from this source. While this is a matter not to be settled by opinion, still we must be allowed to insist that this notion appears repugnant to both sentiment and reason. One of the cardinal injunctions nature lays on all living things is aversion to their own excreta. True, it is an established fact that matters derivable only from amniotic liquors are found in the meconium of the child and of other animals, affording conclusive proof that this liquor has been swallowed, but it does not thereby follow that this is done to obtain nourishment, any more than that the movements of the legs are made for purposes of locomotion. The rhythmical movement of the muscles of the pharynx and esophagus, inherent in all animal tubes, may be simply a discharge of nerve force in response to the promptings of erethism, and the swallowing of amniotic fluid incidental.

That the amniotic fluid is in large part excrementitious there is no diversity of opinion, though the complete source of its origin is not fully known. In the animals below the marsupials its origin is certainly embryonic, since it is formed exclusively in the egg, and no other function has ever been ascribed to the amnion in that case than that of a bag for the excreta

of the embryo. We are not able to believe that nature intended the babe to feed on fluid that contains its own urine and other discharges, and do not believe that it derives nourishment from such a source.

On the perennial question of the cause of head presentations the author presents fairly the multifarious views of obstetricians. Among others is that of the writer of this review, which ascribes this phenomenon to the instinctive swimming movements of the fetus, which being made mainly by the legs causes it to dive down headforemost to the outlet. And he confesses that it is a source of great pleasure to have these views selected at length, as fit to be considered among the choice contributions to the elucidation of this puzzle of centuries, and that too by an authority second to no other of the age.

A selection is given also from Dr. Foulis, of Edinburgh, who, from the study of sections through the pelvis and abdomen, concludes that the continual movements of the child's lower limbs, in extension, cause the head-downward position. This view was first announced by Dr. Foulis after the writer's had been published in the American Practitioner and News three years before, and in the New York Medical Record and the New York Medical Journal, as part of the proceedings of the Kentucky State Medical Society. Edinburgh is fortunate if her doctors have a surfeit of good medical reading without even knowing what appears in these journals. But while making reclamations of priority, as the French are so fond of saying, we will not reject support from so high authority as Dr. Foulis.

Prof. Parvin introduces the law of Prof. Pagot into the discussion, and to this we propose to recur when considering rotation.

An interesting discussion of the question of maternal impressions is entered into, and the author, while rather leaning to the view that such impressions are probable, is willing to leave the subject *sub judice*.

In placenta previa, the author favors most the method of Braxton Hicks, except that he does not urge delivery before the child is viable, unless the symptoms are urgent.

As to the determining causes of labor, Prof. Parvin comes to the prudent conclusion that

none of the various hypotheses that have been put forward are in the least satisfactory.

We are brought by this to the causes of rotation, one of the questions which has practical application of great value.

Prof. Parvin contends that rotation is due to movements of accommodation, and quotes with favor the law formulated by Prof. Pagot: *When a solid body is contained in another, if the container is the seat of alternate movement and rest, if the surfaces are slippery and little angular, the content constantly tends to accommodate its form and dimensions to the form and capacity of the container.* But if we accept both these statements as true, they do not bring us any nearer to the definite physical processes by which this accommodation is effected. Nor do we go far enough when we speak of the "long end of a lever turning to the line of least resistance." On close analysis the expression does not convey a satisfactory meaning.

A lever does not move of itself, no matter what the proportion of its arms may be. It is an instrument and not an agent. All the levers in existence would accomplish no work without the application of power. When, then, we speak of the long arm of the lever we can but mean that we have the means of applying the power at a greater distance from the fulcrum than the fulcrum is from the weight or resistance. What then is the power we apply to the long end of the lever? It must be, it can only be, that in passing through the canal the groove or grooves made in the walls by the extremity of the long arm of the lever are deeper on one side than on the other, and that the greater resistance of the higher wall on one side pushes the arm of the lever toward the other. But inequalities there must be, both in the shape and resistance of the two sides of the pelvis on the one hand, and of the two sides of the pre-enting extremity of the fetal ovoid on the other. If either the fetal mass were absolutely cylindrical or the canal perfectly circular, there could be no rotation.

These inequalities on the part of the canal are found first, probably in the steeper gradient of the passage around the pubes as compared with that along the sacrum, coccyx, and pelvic floor, and secondly in the greater flare of the

anterior half as compared with the posterior half of the walls of the canal. Indeed, tracing backward from the lower margin of the pubes, we find that if a line be drawn transversely across the inferior strait of the pelvis from the ramus of one ischium to that of the other at a point one third of the distance from the pubes to the sacrum, the length of this line will be nearly or quite equal to the longest transverse diameter of the pelvis in this plane. This disparity becomes still more marked as the coccyx yields and the floor of the pelvis gives way and forms a groove for the advancing head.

The inequalities on the part of the fetal ovoid are also two. First, the long arm of the lever being on the side of the face in vertex presentations, and in the case of the after-coming head, on the side of the fetal spine in face presentations, and on whatever side the head lies in trunk presentations. Secondly, the roughnesses are on the side of the face in vertex presentations, of the spine in face presentations, and of the face in case of the after-coming head. But what shall we say of breech presentations, in which the two opposite sides are identical in form and shape. Entering the pelvis in the oblique diameter, the anterior hip first strikes the floor of the pelvis which places the pivot of the presenting part on the side nearest the sacrum, and this gives the long arm of the lever to the posterior hip, the anterior wall of the groove or grooves is thus cut into the pelvic wall, acting with advantage on this long arm, turns this hip backward and forces the others farther to the front. Why shall the trunk rotate if there is no difference in the arms of the lever, and no inequality in the roughness of the two hips? Even if the canal had perfectly rigid walls, the direction of the inclined plane it would stamp on the side of the presenting part of the ovoid would force the posterior hip backward.

The chapter on forceps is simply superb, but the length of this notice precludes the pointing out of features of exceptional excellence.

In conclusion, it is not needed to say that whoever would read a work on obstetrics as charming in style as it is choice and full in the selection of materials can not go amiss in making this work his companion. D. T. S.

The National Medical Dictionary, including English, French, German, Italian, and Latin Technical Terms used in Medicine and the Collateral Sciences, and a Series of Tables of Useful Data. By JOHN S. BILLINGS, A. M., M. D., LL. D., Edin. and Harv., D. C. L., Oxon., Member of the National Academy of Sciences, Surgeon U. S. A., etc. With the collaboration of W. O. ATWATER, M. D., FRANK BAKER, M. D., S. M. BURNETT, M. D., W. T. COUNCILMAN, M. D., JAMES M. FLINT, M. D., J. A. KIDDER, M. D., WILLIAM LEE, M. D., R. LOIRNI, M. D., WASHINGTON MATTHEWS, M. D., C. S. MINAT, M. D., H. C. FARROW, M. D. Two volumes. 1530 pp. Philadelphia: Lea Brothers & Co. 1890.

Those who have been much engaged in translating medical articles from German, Italian, French, or Spanish into English, have constantly felt the need of a dictionary which will be to the English language what the great dictionary of Nysten, in its various revisions, has been to the French.

The general dictionaries of these several languages on the one hand and English on the other do not contain medical terms in sufficient fullness to be available for the purpose of good translation, and the requisite information it has been constantly necessary to seek through the French dictionaries.

Except as to the Spanish language, this dictionary supplies the need most admirably. The aim of the work does not seem so much to supply a mere dictionary of medicine and the collateral sciences as to meet specially the requirements of translation. The definitions are brief, the work having nothing of the encyclopedic character.

In one respect this dictionary far surpasses the French of Nysten, in that it not only gives the French, Italian, German, and Latin terms in connection with and following the English term, but these terms are again repeated as leading words in their proper place. This facilitates in the highest degree both the translation of English into the other languages and the other languages into English.

The author must have had good reasons for selecting the Latin instead of the Spanish, but they do not appear to us. No one now writes medical treatises in Latin, while nearly

all ordinary Latin medical terms appear in current dictionaries. It is true, Spanish medical writers are not at present contributing liberally to the stock of original knowledge, and those who know Italian have little trouble translating scientific Spanish; but, considering the close intercourse we are now having with Spanish-speaking peoples and their great number, we should have taken pleasure in seeing the Spanish given at least as prominent a place as it has in the classic dictionary of the French.

Besides greatly aiding those who have studied the languages it embraces in their work of translation, this dictionary can not but act as a stimulus to thousands of physicians to study these languages, and thus gain at first hands and in good time treasures of knowledge supplied by foreign writers.

The work is another block in the noble monument Dr. Billings is so liberally aiding to build to American genius and American learning.

D. T. S.

History and Pathology of Vaccination. Volume 1—A Critical Inquiry; Volume 2—Selected Essays. By EDWARD M. CROOKSHANK, M. B. 466-610 pp. Philadelphia: P. Blakiston, Son & Co. 1889.

This work is a history of inoculation in so far as this procedure comes within the period of history, and of vaccination from the beginning.

The able author, with great industry and perseverance, has ransacked the libraries of Europe to find material bearing on the introduction of vaccination.

The work is instructive in more senses than one, and not least in throwing light upon the habit of the world in the matter of receiving discoveries, and the difficulty of their promulgation.

It might be thought that in view of the fact that the whole world was exposed to smallpox, the greatest of all its scourges, one would only have had to lay claim to having discovered a preventive to secure for it everywhere a prompt and fair trial. But the age for such things had not yet come, and in this case it was well for the renown of Dr. Jenner that it had not come.

It is shown by this history, not only that there was a widespread tradition among the dairy maids that cow-pox, when communicated to the human being, was a safeguard against the contagion of smallpox, but that in 1774, years before Jenner first resorted to vaccination, a farmer by the name of Benjamin Jesty had actually inoculated his wife and children with the cow-pox for the purpose of shielding them against smallpox, which it effectually accomplished. Mrs. Jesty was subsequently presented to the Jennerian Society of London as an example of such successful vaccination. A deliberate and successful test had also been made at one of the London hospitals to see whether a woman who had had the cow-pox would be proof against smallpox inoculation. If the public in that age had been as ready to recognize discoveries as now, it is more than likely that to some other than Jenner would have been awarded the honor of having discovered the beneficent influences of vaccination. It required a man of the exalted standing, of the courage, perseverance, and learning of Jenner to push it to a general recognition.

It is curious in itself, but when paralleled with the experience of Harvey and others, not so curious, what effect Jenner's discovery had on his practice.

Having been urged to go to London, and assured that he would enter at once into a lucrative practice, Jenner writes as follows, after having remained for some years in the metropolis:

"I have now completely made up my mind respecting London. I have done with it, and have again become the village doctor. I found my purse not equal to the sinking of a thousand pounds annually (which has actually been the case for several successive years), nor the gratitude of the public deserving such a sacrifice. How hard, after what I have done, the toils I have gone through, and the anxieties I have endured in obtaining for the world a greater gift than man ever bestowed on them before (excuse this burst of egotism), to be thrown by with a bare remuneration of my expenses."

Jenner had become too large a tree to be allowed quietly to take root in London. All the 10*

other practitioners were afraid of him, and hedged well against him.

But to gain a proper survey of this most interesting subject one must scan the pages of this charming history. Few readers may be able to afford the time to go through two large volumes in order to be placed in possession of the facts connected with the introduction of vaccination, and yet we have here a work that will be a treasure in the centuries to come; for by its production Professor Crookshank becomes the classic historian of the most momentous event in the history of the human race, from the period when rude tribes chipped the flints that time, through more than a thousand centuries, has buried a hundred feet beneath the Nile, down to this present day. D. T. S.

A New Medical Dictionary, including all the Words and Phrases used in Medicine, with their Proper Pronunciation and Definitions, based on Recent Medical Literature. By GEORGE M. GOULD, B. A., M. D. With elaborate Tables of the Bacilli Micrococci, Leucomaines, Ptomaines, etc.; of the Arteries, Ganglia, Muscles, Nerves, etc., Plexuses; of Weights and Measures, Thermometers, etc.; and Appendices, containing classified Tables, with analyses of the waters of the mineral springs of the United States, and Tables of Vital Statistics. 519 pp. Philadelphia: P. B. Blakiston, Son & Co. 1890.

In the preparation of this dictionary the author claims to have been guided by the following distinct purposes:

1. To include the new words and phrases coined during the past ten years.
2. To frame all definitions by the direct aid of new, standard, authoritative text-books.
3. To omit obsolete words.
4. To make a volume characterized by its compactness, logicalness of arrangement, conciseness of definitions, and convenience of size and price.

In all these aims he seems to have been eminently successful.

The average reader will find the instances rare, indeed, when it will be necessary to go beyond these pages for the definition of any word met with in the course of his studies.

To the medical student it is especially

adapted, and what ever work of reference in his more advanced studies he may require, till some better candidate for his favor is offered, Gould he must have.

Among other agreeable features in regard to this work, it is pleasant to many of us at least to note that among the collaborators appears the name of Professor J. W. Holland, who formerly taught so acceptably in Louisville. D. T. S.

Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

In accordance with time-honored precedent, the Harveian oration was delivered in the library of the Royal College of Physicians, before a large gathering of members of the medical profession and Fellows of the College. The president, Sir Andrew Clark, presided over the assembly. Founded originally by William Harvey in celebration of the benefactors of the institution, the annual lecture and feast have come to be observed solely as a commemoration of the "famed circulator of the lower world." In the course of an eloquent panegyric, Dr James Andrew, the lecturer on this occasion, alluded to the mass of so-called "clinical literature" published nowadays as one of the worst evils that beset the medical profession. A common reproach cast upon its representatives was, that they pretended to be scientific and were not; but in his opinion the fault, if any, lay with the physiologist who failed to supply them with the knowledge he alone could give. Dr. Andrew went on to deal with the unsatisfactory treatment of hemoptysis, in respect of which he declared clinical observation had almost wholly failed. In the evening the Fellows of the College dined together, under the presidency of Sir Andrew Clark.

In a note on analysis of bile, Mr. Fairley says that from a biliary fistula the daily discharge was thirty ounces, much in excess of the quantity mentioned in the text-books. He states that the liquid was free from sulphates, while copper was always present. The gall-bladder

fluid which mixed with the bile was possessed of considerable antiseptic properties.

The Governor General of India has received a communication from Baron von Müller, an eminent scientific authority of Melbourne, announcing that he has found the real cause and effective cure of snake poisoning. Hitherto the mode in which the venom of serpents produced fatal effects has been a mystery. The elaborate series of experiments carried out by the Victorian savant have, he states, not only rendered it clear how the poison operates in producing death, but have pointed out a remedy which, when applied in time, will save the life of the patient. According to Herr von Müller, the venom of serpents does not destroy the tissues of the body, but has merely a dynamic effect suspending the action of the motor and vaso-motor nerve centers. This discovery at once indicated that the proper kind of antidote would be something which would "stimulate and increase the functional activity of these nerve centers." This remedy is supplied by strychnine, which is directly antagonistic in its action to snake poison. Herr von Müller has applied strychnine upon a large number of persons bitten by the tiger snake and other venomous serpents, and with invariable success. The way in which he employs it is to inject ten to twenty minims of the drug under the skin of the patient, and to repeat the operation every fifteen minutes until slight muscular spasms are produced, these being an unfailing sign that the patient is out of danger. Large doses of strychnine may be injected into the blood of a person who has been bitten without producing any injury, until it has completely neutralized the effect of the snake poison. The importance of this discovery, if confirmed, can hardly be overrated. In India, where over thirty thousand persons are killed by poisonous serpents every year, Baron von Müller's communication has naturally been received with the deepest interest.

The Cremation Society of England invited a number of sanitary inspectors to visit the crematorium at St. John's, Dorking, and provided for their instruction a demonstration of the manner in which the process is carried out. Nearly one hundred members of the Sanitary Inspectors Association, Dr. B. W. Richardson, Sir Spencer

Wells, and other gentlemen accepted the invitation, and were met on arrival by the secretary of the association, who conducted them to the crematorium, which is a plain brick edifice without any pretensions to architectural beauty. It contains a plain and roomy chapel, in which the burial service is read, and opening from this is the entrance to the furnace, which was devoted to the incineration of the body of a sheep. The body having been committed to the flames, the company adjourned to the chapel, where Sir Spencer Wells spoke a few words of welcome to the members, and was followed by Dr. Richardson, who admitted that he was at first disposed to regard the earth to earth system as the best means of disposing of the dead. Latterly, however, he had been brought to look upon cremation with greater favor, and was disposed to agree with Lord Shaftesbury, who asked, If they objected to it on religious grounds, what were they to say of the blessed martyrs who were burnt at the stake in defense of their faith? Whatever might be said against the process, he was sure that all present would bear testimony that it was the most rapid, the most perfect, and the most healthy way of disposing of the dead. The secretary said, although the society had been established thirteen years, only one hundred and thirty-eight bodies had been cremated. Of this number thirty-eight had been brought during the present year, and he looked upon this as a proof that the idea of cremation was obtaining a hold upon the public.

The principle of the Dufferin hospitals in India does not appear to be appreciated by the native women of Lucknow. So free are they from the habitual shyness of their race, that at the well known Bahrampur hospital in that city they are stated to exhibit a decided preference for male doctors. Although there is a woman's ward with a lady M. B. in charge, the inspector general reports, that as regards the nine hundred and thirty-four important surgical operations performed in the female department, the large majority have been done by the civil or assistant surgeons. It is observed, however, that most of these were of a nature unconnected with the sex of the sufferer. "I myself," says Dr. Rice, "have known women insist that the operations should be done by the male doctor; and

not only that, but that they should be done in the male hospital, so as to make sure of his operating.

In his introductory lecture to the students of the St. Mary's Hospital School Mr. Handfield Jones, by way of illustrating the necessity of "estimating not only the disease but the patient," related a story of a young lady aged nineteen, wealthy and of high social position, who came in January under the care of an eminent physician skilled in chest complaints. She complained of prostration and palpitation, and on examination was found to have "slight irregularity of the cardiac action, with a soft bruit at the apex." After three months of treatment the condition of affairs was but little changed. But one morning in April the housekeeper had occasion to call and see Mr. Jones, and she made this interesting statement: "The doctors say her ladyship has got a slight form of heart disease, but I know a young gentleman who, if he would only come forward, could do more for her heart than all the doctor's medicines." Curiously enough, adds Mr. Jones, the following week the young man did come forward, and the eminent physician lost his patient.

Dr. Symes Thompson has delivered a course of Gresham lectures on the subject of the preservation of health.

The Royal Commission on Tuberculosis has resumed its sittings after the summer vacation, and scientific evidence will now be called as to the state of knowledge at the present time with regard to the danger of tuberculous food products and the health of the community.

LONDON, October, 1890.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

At the last meeting of the Société de Biologie the following subject was brought to our notice: The presence of the bacillus of tetanus in the excrements of the horse and of the bullock in a healthy state.

MM. Sanchez, Toledo, and Veillon: One says, since the researches of Nicolaïer, that the bacillus of tetanus is spread in very great abundance in the superficial strata of the soil. Since this discovery a great number of observations

of human tetanus have permitted one to prove not only the presence of the bacillus of Nicolaïer in the sore, but also the previous contamination of this sore by the earth. The telluric origin of tetanus is then henceforth clearly established.

In the course of work that we pursue upon tetanus, in the laboratory and under the direction of M. Straus, we have applied ourselves to search for the presence of the bacillus of tetanus or of its spores in some other media than the earth. M. Reitsch had found it in the dust of hay; other observers have confirmed this statement. Sormani caused various animals to swallow fodder soiled by the earth, procuring it from gardens, from the public way or from manured fields, and he proves that the excrements from these animals which did not contract tetanus were found to contain the sporulous bacillus of Nicolaïer. Chicoli Nicola declares he has found it in the excrements of horses affected with tetanus; but the manner of manipulation with this author, as well as the characters of the cultures that he obtained, rendered his experiences little demonstrative.

We have assured ourselves, as Sormani, that some animals (rats, mice, guinea pigs, rabbits) nourished with some aliments moistened with the pure cultures of tetanus do not contract the malady, but that their excrements were tetanigenous. These facts have led us to search for the presence of the bacillus of tetanus in the excrements of healthy animals.

Our experiences have concerned the excrements of the horse and of the cow. We have proceeded in the following manner: Some dejections of the horse are gathered at the same moment of defecation in some sterilized vases. In a bag prepared in the skin of the back of the rabbit, near to the base of the tail, one introduces the dejections of the horse. (It is necessary to inoculate in quantities enough notable, about the size of a large walnut.) As reactive animals it is indispensable to employ rabbits; the mice, and the guinea-pigs, which are very sensible to the tetanic virus, are not in the least so to the action of septic vibriion contained in great abundance in the excrements, and they die the most frequently from experimental septicemia (oedème malin), which does not leave

to tetanus, malady of incubation much longer, the time to establish itself. The rabbits, as one says, present a receptivity much less than the guinea-pigs and the mice for the septic vibron, and that is the reason why it is necessary always to choose them when it concerns to inoculate from the earth, or from other containing matters, at the same time with the spores of tetanus those of the bacillus of the edème malin.

The rabbits thus inoculated with the excrements of the horse died, some of septicemia at the end of two or three days; the others, in much greater number, died at the end of five or six days with all the symptoms of tetanus. At the microscopic examination of the pus, or of the serosity of the sore of inoculation, one proved by the side of other bacteria (micrococcus, bacilli) the presence of the bacillus of Nicolaïer under its different forms of fine and thin bacilli, without apparent spores having slow and flexuous movements, and of the characteristic sporulous forms resembling the head of a pin. When the examination is practiced immediately, or a little time after the death, the sporulous forms are much more rare than the others. But if the carcase be left to itself, under the ordinary temperature, during twenty-four or thirty-six hours, one sees the number of the sporulous bacilli become more and more considerable.

If one inoculates the pus of the sore of these rabbits into mice, white rats, or guinea-pigs, one gives to them a tetanus type, and in examining the pus of the sore of these animals one finds there the bacillus of Nicolaïer mixed with other organisms.

We have likewise succeeded in obtaining some pure cultures of the bacillus of tetanus, with the pus and the serosity of the sore of rabbits inoculated with the excrements of the horse. With eight inoculations made into some rabbits with the excrements of six horses, we have four times determined tetanus.*

We have had the same experiences with cow dung which has been inoculated into two rabbits; these two animals died of tetanus.

The experiences that we are about to relate convey a new proof in support of this fact: That the feculent matters of healthy animals, not at all affected with tetanus, do often contain the tetanic microbe clothed in all its virulence.

We have shown that the excrements of the horse are often tetanigenous. Here, therefore, is an experimental fact, instructive in point of view of the interpretation of the theory of the equine origin of tetanus produced and defended with authority by M. Verneuil. It results, in fact, from the very minute search to which he has devoted himself, that tetanus comes unlooked for very frequently in consequence of traumatism to individuals in contact with horses. This fact henceforth finds its interpretation quite natural, since we know that the excrements of the horse may contain the bacillus of Nicolaïer.

We do not, however, conclude therefrom, be it well understood, that tetanus is a malady of equine origin, as is glanders, for example. The importance of our studies lies in the establishment of the fact that tetanigenous excrements may come from healthy animals. We maintain only that the horse and the cow take to themselves with their aliments, hay, straw, herbage, more or less soiled by the earth, and swallow thus some spores of the bacillus of tetanus. These spores, as those of septic vibron, resist to the action of the digestive juices and are again found in the excrements and in all their virulence.

Upon a case of tetanus in an epileptic, by M. G. Camuset, the author of this memoir reports the observation of an epileptic affected with madness, together with mental troubles and presenting convulsive fits, who was taken with traumatic tetanus in consequence of a burn he had received in falling into the hearth of his chamber.

During the whole term of the tetanus the crisis of epilepsy ceased, and it was not till twelve days after the first appearance, when the stiffness of the muscles was less marked, that the first epileptic attack showed itself. What is singular, after the end of the epileptic crisis the muscles entered into complete resolution; then, after some time, they tetanized afresh.

*One sees that these results are in contradiction with those obtained by M. Peyraud (de Libourne), who declares to have had only negative results in inoculating the dung of the horse (Academy of Medicine, 7th October, 1890.)

The explanation of this fact, which is analogous to what one observes in epileptics under the force of an acute febrile affection, is very difficult to find; perhaps, at the moment when the epileptic release takes place, the cells of the anterior horns of the marrow obey the cerebral cells, although they be in some special pathological conditions—conditions into which they return as soon as the cerebral discharge is appeased. This is an observation which has only a very hypothetical value.

PRACTICAL MEMORANDUM.—(*How the physician ought to be careful of the skin of his hands, by M. Meyer.*) The frequent washing with or without antiseptics irritates the skin and produces excoriations or redness. The author advises the rubbing of the hands, after having washed and dried them, with one of the following pomatums, which have been recommended to him by Professor Liebreich: 1st, Lanoline, 50 grams; vanilline, 1 centigram; essence of roses, one drop. 2d, Lanoline, 100 grams; paraffine, 25 grams; vanalline, 1 centigram; essence of roses, 1 drop.

TREATMENT OF OZENA.—(M. C. Dr. Barataux.) 1. In order to disembarass the nasal passages of they scab that the inclose, make first morning and evening a nasal irrigation with a liter of tepid water, in which is dissolved one or two teaspoonfuls of the following powder:

Bicarbonate of soda.....	50	grams.
Borate of soda.....	30	“
Chlorate of potash.....	20	“

F. s. a. It is necessary to take care to hold horizontally the canula of the English syringe in bending the head lightly forward and without taking breath while pressing upon the injector.

2. Then a second injection is made with the mixture of the two following solutions which are prepared separately: (a) In a glass filled with hot water put a teaspoonful of the powder of boric acid. (b) In a second glass, containing tepid water, pour a dessertspoonful of the solution: Naphthol α or β , 5 grams; alcohol, 10 grams; boiling water, 1 liter.

3. Gargle with the quantity of a Madeira glassful of the following solution:

Borate of soda.....	10	grams.
Distilled water.....	250	“
Glycerin.....	30	“
Peppermint water.....	30	“

It is necessary to throw the head backward and to make some movements of deglutition, then to bring the head forward, in making an effort of expiration, the mouth being shut in order to permit the liquid to pass out by the nasal passages.

4. Clean well the pharynx and the nasal passages with a thin stick covered with cotton. Paint consecutively all the parts with a stick covered with wadding, dipped in the following solution:

Naphthol β pulverized.....	5	grams.
Powdered camphor.....	10	“

Triturate to liquefaction and add vase-line liquid, ten to fifty grams, f. s. a. sol. Every eight or fifteen days cleanse alternately with the following solution:

A cresylic.....	1	gram.
Glycerin.....	50	“

F. s. a. (We reject the employment of creolin and of cresyl in injections or atomizations.)

6. In cases where the secretion is abundant, and when the patient is not able to be regularly attended by the physician, it is necessary to add to the irrigations some atomizations with the solution of diluted naphthol, which alternates with a solution of creosote at 1 300 or with some balsamic solutions (pitch or tar, benzoin, balsam of tolu, turpentine) employed alone or united. A. M. G.

PARIS, October 1, 1890.

Abstracts and Selections.

GRAVES' DISEASE.—The value of accurate clinical observation finds no better illustration than is afforded in the history of the growth of knowledge upon Graves' disease, the characters of which have been so lucidly set forth in these columns by Dr. Hector Mackenzie. The way in which the knowledge of the features of this singular affection has been slowly built up during the half century in which its existence has been recognized is indeed typical of medical

research. As it became familiar to observers, fresh points in its clinical history were added to the list of its phenomena. These new features were more or less essential, while some of the points once deemed essential were noted to be not infrequently conspicuous by their absence. Thus there has been gradually evolved a considerable category of disorders of innervation and nutrition which are linked together under the same nosological head, but which, taken apart, might have seemed to have little in common. It would be pre-umptuous to say that the catalogue is yet complete; indeed, there are obvious lacunæ still to be filled, and there is no reason to doubt the possible existence of other manifestations of a neurosis so varied and so all-embracing, which may possibly have eluded observation, or from their infrequency have passed unrecorded. The affection shows the importance to be attached to the record of signs seemingly trivial and slight. However, whether there is much more to be ascertained or not, the striking fact is that the points already established have widened enormously the clinical conception of Graves' disease. It is impossible now, in the presence of such additions to knowledge, to assign a primary importance to either of its leading features, for example, the thyroïdal enlargement, the proptosis, or the cardio-vascular derangement. These and all the other manifestations, of which tremor is, according to Dr. Hector Mackenzie, the most prominent, can not but be the effect of some central derangement to which they are all subsidiary. In what that derangement consists no one can precisely say. Dr. Warburton Begbie's belief in a general blood change is not supported by facts. The original idea of some primary disorder of the functions of the thyroid could only be maintained when so much of mystery enshrouded that organ, and on the erroneous belief that the goiter was an invariable feature of the affection. Now that increased light has been thrown on the functions of the thyroid, arising out of the investigation of myxedema, such a view is no longer tenable. Nor is it possible, without straining analogy too much, to see any connection between myxedema and Graves' disease. Almost the only point of affinity lies in the fact, common to both, of the greater liability of the female sex to be subject to them. Otherwise there would seem to be far more in the nature of antithesis than of analogy between the two conditions, the one of which seems to depend on the abeyance of function of the thyroid gland, and the other to exhibit as one (and that not the most constant) of its features an enlargement of this body.

In marked contrast to the degree in which

the clinical conception of Graves' disease has expanded is its singular lack of pathological evidence, and the failure to find, after the most careful scrutiny, any substantial lesion which could be regarded as the *fons et origo mali*. Even in cases marked during life by positive paralysis, as in the remarkable one of ophthalmoplegia recorded by Dr. Bristowe, no definite cause of such defect has been ascertained. Such changes that have been described are notable for their fitful character and their, so to speak, accidental presence. Lesions have been met with in brain, cord, and sympathetic, but so inconstantly as to deprive them of any real significance. In spite of these failures it must be that the root of the trouble lies in the nervous system, since there is no other central mechanism, disorder of which could produce so complex and so varied a group of phenomena as is met with in the forms of the disease. Still the search for nervous lesions has been in many cases so profound, with, on the whole, such barren results, that we are almost forced to the conclusion that either our present means are not fine enough to detect the radical organic lesion, or that the change is such as to defy all such scrutiny, being, in fact, dynamic rather than organic. The existence of such a change must always remain in the region of hypothesis until at least some tests as yet unknown can be applied to dead tissues to prove the past occurrence of purely functional disturbance.

Such, we gather, is the conclusion that has forced itself on the mind of Dr. Hector Mackenzie, who is singularly happy in his comparison of the symptomatology of Graves' disease with the more transient neuro-vascular disturbance excited by the emotion of fear, a comparison which is heightened by the definite information we possess of the initial history of many a case. Like epilepsy, chorea, and perhaps diabetes, it may be that in this disease the origin of its varied phenomena depends on some fine derangement of the cerebral mechanism. It requires no great effort of imagination to relegate its phenomena, in all their variety and capricious association, to the loss of nerve control. To follow out Dr. Hector Mackenzie's parallel, we see in the manifestations of fright, the staring eyeballs, the rapidly beating heart, the trembling, and the sweating, signs which are reproduced in Graves' disease, and even the swelling throat of emotional disturbance may be typified in the goiter of the malady. And of the signs and symptoms reviewed in these interesting lectures there is not one which may not be referred to primary disorder of nerve function, acting either immediately or through the medium of the circulation. Such are the cramps, the paretic, and paralytic phenom-

ena, the occasional thermal disturbance, the defective nutrition of skin and its appendages, the mental derangements, the dyspnea, vomiting, and other signs; while to secondary vaso-motor disturbance may be assigned such events as the intermittent albuminuria and many another symptom. Chief of all must be placed the functional disturbance of the heart, as shown in palpitation and acceleration. Of late much attention has been given to the "rapid heart," which in some persons seems to be habitual, and in others developed independently of any other noticeable derangement of the nervous system. Many of such cases doubtless belong to the same category as Graves' disease, for the line is too fine to be drawn between them and those cases in which the more characteristic features of this affection are but slightly marked. We have learned that the term "exophthalmic goiter" is too narrow a designation for a morbid state which may exist without either exophthalmos or goitre, and therefore we concur in the propriety of retaining the neutral term "Graves' disease," although the area implicated by the affection recognized by that illustrious clinician was but small compared with that which it is now known to occupy. Yet we may be content to leave nomenclature aside, provided only that we recognize the wide-reaching affinities presented by the clinical facts of so many types, but all more or less bound up together. The subject is one for thought as well as observation, and the whole tendency of the knowledge so far gained upon it is to relegate Graves' disease and its allied disorders to the great group of the neuroses.—*London Lancet.*

THE ACTION OF EXALGINE.—M. Desnos has recently undertaken a series of researches on this new substance. He finds its influence on high temperatures to be very slight, while its action as an anodyne is, on the contrary, very marked. He insists, however, on the sensations, almost amounting to vertigo, which not unfrequently manifest themselves when the drug is administered under certain conditions. Sweating, often profuse, was also noted in many instances, often localized or most marked at the spot where the pain for which the drug was given had its seat. These drawbacks did not usually supervene except when the dose administered ranged from 50 to 75 centigrams. With the latter amount very slight cyanosis, which often escaped observation, was developed. He finds that the alteration of the blood does not go the length of developing methemoglobin, as has been asserted by H-nocque, but there was a certain amount of destruction of oxyhemoglobin. Generally

speaking, this substance is well borne by the digestive organs, eruptions being rarely or never developed. The urinary secretion is usually diminished in quantity and gives chemical reactions, showing the presence of exalgine in considerable quantity, which goes to show that it is largely eliminated by the kidneys. As to dose, 25 centigrams will sometimes suffice; 50 centigrams, however, is an average dose; but as much as one gram and a half may be given in twenty-four hours, in divided doses of 25 centigrams. M. Desnos has employed this substance in facial neuralgias, especially of a congestive origin. In a case of ophthalmic zona one gram and a half relieved the suffering, which was most acute. Cure was also soon brought about by means of exalgine in neuralgia of a syphilitic or anemic origin. In intercostal neuralgia the relief obtained was not so satisfactory, while in that of the abdominal regions again the effect was good. In a severe case of sciatica the exhibition of one gram and three quarters during a period of three days completely removed the pain. It was also found of great service in a case of renal colic; while in *tabes dorsalis* it appreciably diminished the lightning pains. In short, exalgine is an important addition to the Pharmacopeia, and will be found of service in suitable cases, provided it is handled with ordinary care and intelligence.

The Etiology and Treatment of Tetanus. At a recent meeting of the Academy of Medicine M. Nocard read a paper by M. Peyraud on this subject. M. Peyraud, having inoculated a number of rabbits with an infusion which he made from hay, says he was able by this means to bring on an attack of tetanus in fifty per cent of the animals inoculated. The animals thus inoculated succumbed in the proportion of five out of every six. M. Peyraud has a theory that a chemical substance capable of exciting symptoms analogous to those caused by the invasion of the system by a given micro-organism will prove by inoculation to be a vaccine against the ravages of the microbe. He has applied this theory to strychnine, considered as the vaccine against tetanus. His method of proceeding was as follows: He injected hypodermically for a period of five or six days a dose of strychnine, varying the dose according to the size of the animal and the appearance of the convulsions. The animals being thus prepared, he inoculated them with pus obtained from an animal previously dead of tetanus. Ten of such rabbits were inoculated; but, in addition to these ten already prepared, he inoculated, as a controlling experiment, four others not previously protected by strychnine vaccination. The whole four non-

vaccinated ones died and three of the ten vaccinated. The death of the prepared animals was attributed to a supplementary injection of strychnine which proved too strong. M. Nocard repeated these experiments by following a somewhat different method. He prepared a pure culture of tetanic bacilli from a lamb. Then he took ten rabbits and injected under the skin of each, for five days in succession, ten drops of a solution of sulphate of strychnine of the strength of 1 in 1,000. He next inoculated the ten with his bacillary culture, controlling the experiment by at the same time inoculating ten untouched rabbits with the same culture. The result, however, was that they all died in from three to five days. He repeated the experiment with slight modifications, but the result was not less disastrous. The conclusion, therefore, was obvious.

Identity of Human and Animal Diphtheria. In support of this proposition, M. Delthil points out that diphtheria may be met with in many different animals with symptoms almost identical. The bacillus of the disease in man, when inoculated on animals, multiplies with rapidity, and the disease itself may be transmitted to man with its original characters. From these facts, and from the history of the disease, M. Delthil concludes it is identical in man and animals. He records thirteen personal observations, and cites in addition several facts noted by different observers, all of which go to show that the transmission of diphtheria from animals, and especially from birds, to man has taken place under circumstances often diverse and little thought of. In conclusion, he urges that if the identity and transmissibility of human and animal diphtheria are admitted, it follows that stables, poultry-yards, dovecots, etc., are very likely to contain the germs of the disease, and to favor in consequence its spread. He therefore urges the necessity for a thorough and constant inspection of all markets, poultry-yards, and dwellings where domestic animals and fowls may be kept, and he points out that the initiative in this respect has already been taken in Germany, Italy, and Switzerland.

Statistics of the Pasteur Institute. During the month of September, according to the report just issued, there were 158 persons treated at the Pasteur Institute. Of these 49 were bitten by dogs proved by experiment to have been rabid, 93 by animals recognized as rabid after veterinary examination, and 16 by animals suspected of rabies. Of the animals, 141 dogs and 17 cats.—*Paris Correspondent, Ibid.*

TREATMENT OF OZENA AND OTHER FORMS OF RHINITIS.—The treatment should commence with the nasal douche. The crusts always ac-

cumulate in the night, and we therefore employ the douche in the early morning. The temperature of the water used for dissolving the saline or other ingredients of the douche should be from 92° to 98° F., and should be tested by the patient's hand before using it. The sulpho-carbolate of soda (two drams to the pint) and an equal weight of bicarbonate of soda or common salt, with from two to ten grains of carbolic acid, is a very good form of douche. As much as two or three pints of this solution are required in many cases, the quantity being regulated by the patient's sense of relief and the feeling that the crusts have been removed. The syphon douche tube may be used in those cases in which the crusts are easily detached and small in size, while for more severe cases a Higginson's syringe fitted with a nasal nozzle is preferable. While using the douche the patient should breathe only through the mouth, which should be kept wide open. The pharynx is thus shut off from the naso-pharynx, and the stream passes round the septum and out through the opposite nostril. The nozzle should be passed alternately into the right and left nostrils, and thus a reversed current is produced and the effect is greater. The crusts often cling obstinately to the naso-pharynx, and when this is the case it is well to use the post-nasal syringe as well as the douche. In some cases a post-nasal throat brush will be required before the viscid adherent crusts can be detached.

Many other antiseptic solutions, however, beside the one mentioned above have been used with good effect, and it is desirable to change the form of antiseptic from time to time, some cases requiring stronger and some weaker forms of douche solution. Permanganate of potash is often used, and is a good deodorant; but it has the disadvantage of staining the upper lip and the margins of the alae, and it leaves indelible stains on the handkerchiefs and any other linen with which it comes in contact. Pain is sometimes complained of during the employment of the douche. This may be due to the solution having too low a temperature, or to its being too concentrated or too irritating in quality. Pain may also be caused by a prolonged use of the douche, the membrane becoming more sensitive as it becomes more healthy and less coated by secretions. As soon as there are indications that the secretions are becoming more healthy, less viscid, and less copious, the douche should be discontinued or used at longer intervals. There is good reason for believing that the olfactory region has sometimes been injured and its function impaired by the too energetic use of the douche, and cases have been adduced which seem to show that injury

of the ear has been occasioned by the same cause. It must, however, be borne in mind that chronic rhinitis is almost always associated with defects of smell and often with impaired hearing. Some practitioners altogether discard watery solutions for cleansing the nostrils. Dr. McClellan, of Chicago, is one of these. He uses hot vaseline as a spray by means of Rumbold's apparatus, and asserts that it is useful in all the various forms of rhinitis, that it "produces no local irritation," and is "much more powerful than the water douche in effecting good results." This remedy can be used effectually by the surgeon alone, whereas the douche is easily applied by the patient, and at more convenient times than would be possible for the use of Rumbold's spray. Side by side with the above mentioned remedies the course of chronic fetid rhinitis may be influenced by the application of sprays of an antiseptic character. The douche alone is not sufficient to overcome the fetor, and it is necessary for the comfort of the patient and those around him that it should be persistently combated by sprays containing various antiseptic remedies. Iodoform may be used in an ointment in the proportion of two grains to the dram of vaseline. The odor of this drug, however, is very offensive to some people, and the ointment should be used only at night. During the day a spray containing ioline and carbolic acid in solution is most convenient, and whenever the stench is severe a chlorine solution freshly made gives very good results. In one of the worst cases that I have seen nothing overcame the fetor so well as sulphurous acid (the Pharmacopeia solution) 1 part to 20 of water, the same solution being applied by means of a throat brush to the naso-pharynx. The patient should live much in the open air, take regular exercise, and be suitably clothed, as free action of the action of the skin and warmth of the surface seem to influence the course of the disease in a favorable direction. A dry climate is also desirable.—*Mr. W. S. Watson, Ibid.*

THE NECESSARY PEROXIDE OF HYDROGEN.
Stop suppuration! That is the duty that is imposed upon us when we fail to prevent suppuration.

As the ferret hunts the rat, so does peroxide of hydrogen follow pus to its narrowest hiding place, and the pyogenic and other micro-organisms are as dead as the rat that the ferret catches when the peroxide is through with them. Peroxide of hydrogen, H_2O_2 in the strong 15-volume solution, is almost as harmless as water, and yet, according to the testimony of Gifford, kills anthrax spores in a few minutes.

For preventing suppuration, we have bi-chloride of mercury, hydronaphthol, carbolic acid, and many other antiseptics; but for stopping it abruptly and for sterilizing a suppurating wound we have only one antiseptic that is generally efficient, so far as I know, and that is the strong peroxide of hydrogen. Therefore I have qualified it, not as "good," not as "useful," but as "necessary."

In abscess of the brain, where we can not thoroughly wash the pus out of tortuous canals without injuring the tissues, the H_2O_2 , injected at a superficial point, will follow the pus and throw it out too in a foaming mixture. It is best to inject a small quantity, wait until foaming ceases, and repeat injections until the last one fails to bubble. Then we know that the pus cavity is chemically clean, as far as live microbes are concerned.

In appendicitis we can open the abscess, inject peroxide of hydrogen, and so thoroughly sterilize the pus cavity that we need not fear infection of the general peritoneal cavity if we wish to separate intestinal adhesions and remove the appendix vermiformis. Many a patient who is now dead could have been saved if peroxide of hydrogen had been used when he had appendicitis.

This single means at our disposal allows us to open the most extensive psoas abscess without dread of septic infection following.

In some cases of purulent conjunctivitis we can build a little wall of wax about the eye, destroy all pus with peroxide of hydrogen, and cut the suppuration short. Give the patient ether if the H_2O_2 causes too much smarting. It is only in the eye, in the nose, and in the urethra, that peroxide of hydrogen will need to be preceded by cocaine (or ether) for the purpose of quieting the smarting, for it is elsewhere almost as bland as water.

It is possible to open a large abscess of the breast, wash it out with H_2O_2 , and have recovery ensue under one antiseptic dressing without the formation of another drop of pus.

Where cellular tissues are breaking down, and in old sinuses, we are obliged to make repeated applications of the H_2O_2 for many days, and in such cases I usually follow it with balsam of Peru; for balsam of Peru, either in fluid form or used with sterilized oakum, is a most prompt encourager of granulation.

If we apply H_2O_2 on a probrag to diphtheritic membranes at intervals of a few moments, they swell up like whipped cream and come away easily, leaving a clean surface. The fluid can be snuffed up into the nose and will render a fetid ozena odorless.

It is unnecessary for me to speak of further indications for its use, because wherever there

is pus we should use peroxide of hydrogen. We are all familiar with the old law: "*Ubi pus, ibi evacuanda*," but I would change it to read: "*Ubi pus ibi evacua, ibi hydrogenum peroxidum infunde*." That is the rule. The exceptions which prove the rule are easily appreciated when we have them to deal with.

Peroxide of hydrogen is an unstable compound, and becomes weaker as oxygen is given off, but Marchand's 15-volume solution will retain active germicidal powers for many months, if kept tightly corked in a cool place. The price of manufacturer's preparation is about 75 cents per pound, and it can be obtained from any large drug house in this country. When using the H_2O_2 it should not be allowed to come in contact with metals if we wish to preserve its strength, as oxygen is then given off too rapidly.

H_2O_2 must be used with caution about the hair if the color is a matter of importance to the patient, for this drug, under an alias, is the golden hair bleach of the *nymphs du pave*, and a dark-haired man with a canary-colored moustache is a stirring object.—*Dr. Robt. T. Morris, Journ. Amer. Med. Association.*

POISONS PRODUCED BY BACTERIA.—A few weeks ago we referred editorially to some experimental work of Roussy upon the pathology of fever, in which he demonstrated what appears to be a fever producing albuminoid, which he termed "pyretog. nin." We have now to mention the labors of Brieger and Fränkel (*Berl. Klin. Wochenschr., Centralblatt für Physiologie*) upon the toxic substance produced by the diphtheria bacillus of Löffler.

Pure cultures of the bacillus were prepared in large quantity in pepton broth with or without the addition of glycerine. Roux and Yersin had previously separated the toxic substance from bouillon cultures and believed that it belonged to the class of enzymes, a conclusion which the writers can not indorse. They succeeded in obtaining the substance dry, and class it among the albuminoid bodies, the "toxalbumen," as they name them.

The cultures were at first passed through a Chamberlain clay filter. The germ free, lemon yellow, clear filtrate proved to be very poisonous to animals, and produced symptoms similar to those caused by inoculation with the bacillus, including the peculiar paralytic phenomena of diphtheria. When heated to $60^\circ C.$ it lost most of its toxic properties. It resisted acidifying with sulphuric acid, and steaming to $50^\circ C.$ An examination for ptomaines and volatile bases gave a negative result. It also failed to diffuse through membranes into water or a solution of sodic chloride. It was precipitated

by ammoniac sulphate and sodic phosphate as well as absolute alcohol, the latter method being the one usually employed. After dialysis and drying *in vacuo* the substance was obtained as a snow-white, amorphous, granular powder, easily soluble in water, from which it was not thrown down by boiling, sodic sulphate, sodic chloride, magnesian sulphate, plumbic acetate, or by dilute sulphuric acid even when heated. It is precipitated by carbonic acid or other reagents that throw down albuminous bodies. With Million's reagent a red color was produced, as well as the biuret and xanthoprotein reactions. The plane of polarized light was rotated to the left. From these various reactions the writers conclude that this substance is closely related to serum albumen, though the ultimate organic analysis showed a composition closely allied to pepton, with the following percentages: C. 45.35, H. 7.13, N. 16.33, S. 1.39, O. 29.80.

This body in a pure state was very poisonous, two and a half milligrams for each kilogram of body weight of the animal experimented with proving fatal, though sometimes only after weeks or months. (This confirms earlier observations by Roux and Yersin.) Very small quantities injected subcutaneously caused abscess and necrosis, and later wasting of the body.

The authors believe that this "toxalbumen" is produced from the albumen of the infected part in the ordinary diphtheritic process, and in this connection recall the "ichthyotoxigen" which A. and N. Mosso obtained from the serum of the murex, and the poisonous albuminoids obtained from plants by Kobert and Stillmark.

Further experiments were frequently hindered by the fact that cultures lost their virulence and stopped producing the poisonous substances. In cultures that had lost their virulence an albuminoid body was found that could be distinguished from the other by its dark brown color and non-toxic properties.

It will be seen from the foregoing that great progress has been made in isolating the peculiar toxic substances produced by micro-organisms. It appears now as though it would soon be necessary to admit, as suggested by Vaughan, before the pathogenic character of micro-organisms can be said to have been established, that its peculiar toxic product shall have been isolated and studied.—*Jour. Am. Med. Association.*

LISTER ON THE ACTUAL STATE OF ANTISEPTIC SURGERY.—(Tenth International Medical Congress.) Since Koch made known his method of the culture of microbes on solid media, there has been considerable extension of our knowledge of micro-organisms, and of the

means by which the animal organism defends itself against them. Metchnikoff has demonstrated that the migratory cells nourish themselves like amebæ, and have a special taste for bacteria which they absorb and digest, thus preventing their indefinite propagation. He calls these migratory cells "phagocytes." This theory explains much that seems mysterious in regard to the relation of micro-organisms with wounds. For example, in the operation for hare-lip the posterior termination of the wound is constantly bathed in saliva which contains numerous kinds of septic bacteria. Yet these bacteria do not penetrate the fibrin which glues together the two cut surfaces, which they certainly would do if the surfaces were composed of a chemically inert surface devoid of life. This is due to the "phagocytic" action of the cells which are present in the lymph soon after its effusion.

This theory also explains why the use of silk ligatures which have not been subjected to antiseptic preparation may not be followed by unpleasant consequences. Zeigler has shown that leucocytes penetrate rapidly into the very small spaces between plates of glass or other foreign bodies which are chemically inert and have been introduced into the tissues. These leucocytes ought, therefore, to be also able to glide into the intervals among the fibers of the silk thread, and to destroy all the microbes which are able to lodge there.

The success attained by Bantock and Lawson Tait without the use of antiseptics appears a stumbling block. But in reality the practice of these surgeons is not devoid of antiseptic means. They purify their sponges; they observe strict cleanliness; this is certainly an antiseptic precaution. They wash the peritoneum with pure water in order to free it from coagula without wounding the peritoneal surface by rubbing it with sponges.

The drainage of the peritoneum is another antiseptic measure; moreover, it is necessary to avoid the application of strong and irritating antiseptic solutions to the peritoneum. But it would be wiser to assure, by means of antiseptics, the entire absence of microbes from the hands and instruments; as to the water used for the toilet of the peritoneum, it is better to have recourse to a feeble sublimate solution (1 to 10,000, for example) than to simple boiled water.

In the surgery of the rest of the body the employment of stronger antiseptic solutions does not present the same inconveniences.

As to the spray, Lister regrets that he formerly recommended it to destroy the microbes of the air. There is not sufficient time for the microbes to lose their vitality in the vapor of the spray.

Since he has abandoned the spray, Lister surrounds the site of the operation with cloths soaked with antiseptic solutions. If, besides the spray, washes and irrigations are abandoned, vigilance ought to be redoubled.

Reasoning by analogy from subcutaneous wounds, Lister says that a wound made under antiseptic precautions could be immediately sealed by covering the line of union by an antiseptic varnish. But he claims that carbolic acid by irritation excites a secretion of serum so abundant that its issue necessitates an opening. Hence the drainage of wounds.

After the recent method of treating wounds with sublimate, the secretion is less and drainage less necessary.

As to external dressings, some surgeons have thought to unite simplicity and security by using cotton wadding sterilized by heat. But this wadding, being simply aseptic, only prevents infection as long as it is dry; once wet through to its external surface by secretions, it may become a septic mass, and there are always wounds where the secretion will remain abundant.

In some cases a perfectly antiseptic dressing may be a matter of life and death; for in these cases with abundant secretions only antiseptic chemicals can prevent the development of septic organisms. With this end in view, Lister employs a combination of the cyanides of zinc and mercury, which is a sufficiently strong antiseptic, and is moreover non-irritating.—*Translated by Dr. F. Neuhoff, St. Louis, La France Méd., Weekly Medical Review.*

CARBON FOR PHTHISIS.—The Vienna correspondent of the Medical Press, September 3, 1890 writes that journal that Julius Pick, of Landskron, Bohemia, again brings forward the carbonic therapeutics as a successful remedy for phthisis. This is a form of treatment that was recognized by Traube in 1860, Zenker in 1886, and accepted by Virchow as rational. Since that time many inquiries have followed up the pathological anatomy, with the view of unraveling the anthracosis. It was found that the coal dust penetrated to the lymphatics in the lung tissue as well as the alveolar cells, blood-vessels, and bronchial glands, where it lay quietly without doing any harm, but in other cases brought about inflammatory changes from the irritation. Statistics were collected by Hirt, Merkel, and others regarding the health of miners and the effects of coal dust, which was found to be relatively good.

A table by Hirt gives phthisis as 1.3 per cent. These are striking results, and gave rise to much speculation at the time, some attributing the favorable results to the lamp soot,

others to the sulphurous gas. The immunity to phthisis of the North Bohemian miners has always been and is still a matter of great surprise.

Coburn and Crocq's results given at the Seventh Congress of Hygiene were not so favorable, unless in mines where a large amount of sulphurous gas was emitted. This led to an examination of another carbon dust worker, the chimney sweep, and 83.6 per cent were found healthy; among those who had followed the profession for upward of ten years the result was 93.6 per cent healthy. Hirt and Merkel confirmed these figures by repeated examination. This might be termed the ancient history of miners' phthisis, but Julius Pick commenced in 1889 to draw our attention to the freedom of phthisis among the North Bohemian miners, who are certainly favored with this immunity. Pick commenced his investigations by inquiring if the alimentary canal had no influence in obtaining this result, as the dust would be conveyed with the food and drink thither, where it would deposit the contained gas and act as an antiseptic conservative, and now asks the question if it be not rational to expect that an organ long kept under the influence of an antiseptic will strongly resist the colonization or development of any infecting germ or tubercular bacillus, and more so when we find the carbon soot of the lamp distributed along the lymphatic tract and interstitial tissue of the lung commonly attacked by the microbe. How to prove the practicability of this treatment by an artificial production of pulmonary anthracosis without running the risk of an inflammatory result was to Pick the first difficulty. To overcome this, he commenced with inhalations of soot in a nascent state by means of a spirit lamp, burning rectified oil of turpentine. The flame was covered with a glass funnel, into which was arranged wood charcoal, while the patient had a tube from this to the mouth for breathing directly. By this arrangement the soot entered the mouth and lungs as in the mines, where part was swallowed and taken into the alimentary canal. In another case he prescribed tablets of lamp smoke containing a centigram.

Twenty-four hours after ten or fifteen inspirations of this apparatus the sputa was found black, and proved that it had entered deep into the alveoli of the lung. With this apparatus he has administered the fuligo inhalation without the least inconvenience or annoyance to the patient for five or six weeks twice a day. Fuligo is a wide term, if not defined. Pick understands this to be the soot from a chimney where wood is burned, but to get quit of all remaining organic remains he subjects the raw

material to a kind of roasting process, which might properly be termed *fuligo depurata*, a black, light powder having no effect on the tubercular process of the lung, which it does not irritate, and seemingly has no marked utility beyond the theoretical presumption of a disinfectant. This was the result of his first experiment. The next step was to have this *fuligo depurata* saturated with a gas taken from coal as well as wood, which he terms *fuligo empyreumatica*, which is also easily borne when depurated.—*Med. and Surg. Rep.*

ACUTE ANTERIOR POLIO-MYELITIS—Opportunities for the examination of the spinal cord in recent cases of polio-myelitis are comparatively so infrequent that every advantage should be taken of them when they do arise. Dr R. T. Williamson, of the Manchester Royal Infirmary, has published (*Medical Chronicle* for September) a detailed account of such a case, where death occurred suddenly five weeks from the commencement of symptoms. The patient was a young man, twenty-two years old, who first complained of numbness in the right hand, the feeling soon extending to the right leg and the left side, and on the third day being followed by complete paralysis of arms and legs. The knee-jerks were absent. There was no anesthesia, and the sphincters were not involved. Rapid muscular atrophy then ensued, but he was commencing to regain some power when death occurred. The lesions found by Dr. Williamson in the spinal cord may be thus summarized: In the lumbar region, a patch of cell infiltration in the outer half of each anterior horn, composed of small round leucocyte bodies and large oval or round nucleated cells. At the periphery of the patch the blood-vessels were greatly distended, and their perivascular sheaths full of round cells. There were no true hemorrhages. No nerve cells were visible in the area which corresponded to the region of the antero-lateral, postero-lateral, and central group of ganglion cells. Such cells still existed in the inner part of the cornu, but those bordering on the patch were shrunken and deformed. The network of nerve fibers was destroyed by the infiltration, but in the white matter no degenerate fibers were seen. The contrast between the anterior and posterior nerve roots was striking. In the former the fibers were scanty, separated by cells and their myelin broken up into fragments, while the latter exhibited very slight changes indeed. The dorsal region of the cord showed only slight cell infiltration and vascular distension in the outer part of the anterior horns, where a few nerve cells were shrunken. In the cervical region the changes were much as in the

lumbar, but less pronounced. The infiltration, however, here extended rather further in a posterior direction; and, moreover, the lesions were slightly more marked in the left than in the right half. In the filum terminale the vessels were dilated in the anterior horns, and a few nerve cells in the outer part had their processes somewhat obscured. In all parts the changes were most marked at the point of entrance of the antero-lateral artery. Micro-organisms were sought for, but not found. Some degenerate fibers were found in the trunks of the ulnar and sciatic nerves.—*London Lancet*.

EFFECT OF CERTAIN SUBSTANCES ON THE RED CORPUSCLES.—M. Mayet, of Lyons, read an interesting paper at the recent meeting of the French Association for the Advancement of Science, in which he gave an account of the effects of various neutral salts and of chloral on the red corpuscles of the blood. Solutions of the strength of 1 or 2 per cent of chloride of sodium, chloride of potassium, sulphate of soda, phosphate of soda, bicarbonate of soda, and sulphate of magnesia, all at first temporarily destroy the elasticity of the corpuscles, and then dissolve or disintegrate the stroma. Solutions of the strength of five per cent or more diminish the size of the corpuscles and harden them. The chloride of sodium has the most preservative primary action, but is most destructive on prolonged contact. As is well known it has been recommended for washing the blood (in a 0.6 per cent solution) in certain cases of poisoning. Sulphate of soda has a great tendency to preserve the chemical properties of the corpuscles, but make them much more rigid than does chloride of sodium. It is not suited for intravenous injections, but is very useful in the laboratory for washing the corpuscles before preparing hemoglobin from them. For this purpose it is better than the 3-per-cent solution of chloride of sodium, which is commonly employed, but which has a considerable tendency to dissolve the corpuscles. Chloride of potassium has a great preservative action, but can not be used for intravenous injections, owing to its toxicity. Carbonate of soda in weak solutions is very preservative. Phosphate of soda in weak solutions renders the corpuscles rigid for a long time; it preserves their form well, and so is useful in diluting the blood for the purpose of counting the corpuscles. Sulphate of magnesia does not dissolve them, but changes their shape more than any of the other salts. Hydrate of chloral is very destructive to the corpuscles when it is in a concentrated solution, but not when it is of less strength than 5 per cent. Intravenous injections of the latter, which may

be repeated several times daily, are very valuable in tetanus, in uremic convulsions, to calm the violent spasmodic attacks in rabies, and in some painful diseases where hypodermic injections of morphia are inefficacious or badly borne. The effects on the heart, respiration, and urine must be carefully watched.—*Ibid*.

PROFESSOR DENNIS ON RECURRENT APPENDICITIS.—The propriety of removing the appendix vermiformis during the intervals of recurrent attacks of appendicitis is the subject of a very carefully written paper by Dr. Fred S. Dennis, surgeon to Bellevue and St. Vincent's Hospitals, New York, published in the Medical News. Dr. Dennis is well known to have large views of the powers of surgery, practiced under antiseptic precautions, in the observance of which he is most precise. Nevertheless he decidedly discourages the removal of the appendix in cases of recurrent appendicitis. He maintains that the operation should not be regarded as either easy or trivial. He shows that in the great majority of cases the disease does not recur. In the eleven per cent in which it does recur, and even in the majority of these, the termination of the disease is in resolution. The other two modes of termination are the formation of pus and the evacuation of the abscess, or in perforation and general peritonitis. The question of the removal of the appendix can only arise in recurrent cases. Dr. Dennis strongly objects to it in the interval of attacks, because he considers it dangerous to the patient, and because, for various reasons, the latter may never again be endangered by the disease. Either the attacks may have destroyed the lumen of the appendix, or have so surrounded the parts by adhesions as to make abscess and even perforation comparatively safe. Even in the emergency of a general peritonitis from perforation laparotomy may save life. In preference to removal of the appendix in the interval of attacks he would recommend early incision and, if necessary, excision at an early stage, say the second or third day of an actual attack. It is gratifying to find the boldst surgeons, and those most confident in their antiseptic methods, speaking in terms of warning and conservatism as to unnecessary surgical interference, and especially removal of parts, and we feel sure that Dr. Dennis in these views expresses the general feeling of the best surgeons. The most obvious fact to practitioners is the large number of such cases that resolve and remain permanently quiescent.—*Ibid*.

AMOUNT OF SUGAR IN BLOOD IN DISEASE.—Dr. N. P. Thinker recently read before the Kharkoff Medical Society a paper on the Diag-

notic Significance of the quantity of Sugar and Reducing Substances in the blood, in which he detailed a number of observations he had carried out on patients in Professor Grube's surgical clinic, the majority of whom were suffering from cancer. The blood of some was taken for examination during an operation, that of the rest being only obtained after death. The examination was in all cases made by means of two processes, that of Fehling Soxhlet and that of Knapp (Knapp's solution consists of cyanide of mercury dissolved in caustic alkali), the mean of the two results being taken. He found that the blood during life always contains less sugar than after death, and that that of persons suffering from cancer contains a larger proportion of sugar and reducing substances than that of healthy persons or of persons suffering from other diseases. Affections of internal organs appeared to be accompanied by a greater percentage of sugar in the blood than diseases of the skin or of external parts. The degree of emaciation produced by cancer did not seem to have any direct effect upon the quantity of sugar in the blood. There did not seem to be any real correspondence between the amounts of sugar and other reducing substances; the sugar was much more constant in its amount, the quantity of the other reducing substances being liable to very considerable variations. In the observations made on various diseased conditions the following were the amounts of sugar found: Cancer 0.1678 per cent to 0.2037 per cent; typhoid fever, 0.0950 per cent; pneumonia, 0.0943 per cent; dysentery, 0.0838 per cent; organic diseases of the heart, 0.0737 per cent; peritonitis, 0.701 per cent; phthisis, 0.0653 per cent; syphilis, 0.0553 per cent; nephritis, 0.0489 per cent; hematuria, 0.0375 per cent.—*Ibid.*

STERILIZED MILK.—So-called "sterilized milk" by no means always deserves its name, in some cases being much fuller of germs than ordinary unboiled milk fresh from the cow. Herr Kohlmann, of Leipzig, on subjecting two specimens of milk sold as sterilized to examination, found that one of them really was so, no germs being discoverable, while the other specimen contained 350,000 germs per cubic centimeter. For the purpose of comparison other examinations were made, and it was found that a sample of fresh milk bought in the street contained about 160,000 germs per cubic centimeter; that is to say, less than half the number in the second sample of so-called sterilized milk. Milk boiled in the kitchen contained 158 germs per cubic centimeter; distilled water kept in an open vessel, 430; water-

works water, 1,064, and water from the Hofbrunnen, 12,000. Herr Kohlmann suggests that the failure of whatever process was used to sterilize the milk may have been due either to water having been mixed with the milk before the process was commenced, or perhaps to too long a time having been allowed to elapse between milking and sterilizing. This last point exercises a very great effect, as is shown by Freudenreich's observations. He found that milk which, when received, contained only 9,300 germs to the cubic centimeter, after being kept for three hours at 60°F. contained 10,000; after six hours, 250,000, and after twenty-four hours no less than 5,700,000. It would, therefore, appear that our knowledge of the conditions under which milk may be really sterilized is at present somewhat insufficient, and that reports of the results of the feeding of infants with milk which is reputed to be sterilized must always be received with a good deal of skepticism unless specimens of the milk have been frequently examined by a competent person.—*Ibid.*

THEOBROMINE AND DIURETIN.—It will be remembered that early in the year Dr. Christian Gram, of Copenhagen, published some results of his experience of theobromine as a diuretic, and his conclusions that in diuretin, the sodio-theobromine salicylate, a salt had been obtained which was easily absorbed and strongly diuretic. Under the direction of Dr. Dujardin-Beaumez, further observations have been made by Mme. K. Pomerantz, which, in the main, confirm the statements originally made by Gram. The results she has obtained are briefly as follows: (1) When given in doses of fifteen grains every two or three hours diuretin is a much stronger diuretic than caffeine; (2) when there is considerable cardiac degeneration it should be employed with some caution, especially when there is albuminuria; (3) under the influence of diuretin the force of the cardiac contractions is scarcely affected; (4) diuretin rapidly increases the quantity of urine passed, and the diuretic effect lasts twice or three times as long as that produced by caffeine; (5) the activity does not wear off readily as the patient becomes accustomed to the drug; (6) micturition is not rendered difficult or painful; and (7) diuretin has no action on the central nervous system. Both theobromine and diuretin give good results in cases of dropsy when diuresis is possible; but as the action appears to consist of direct stimulation of the renal epithelium, it is obvious that the activity of the drug is seriously interfered with in cases of advanced kidney disease.—*Ibid.*

DR. HERMAN STIEDA (*Beitrazur pathol.—Anat. und allg. pathol.*, vii, 1890) has confirmed the observations upon rabbits, made by Nauwerck in 1888, that these animals bear extirpation of the thyroid when cats and dogs are destroyed by the operation. The relation in weight of the petuitary body in rabbits he found to be 1:3.3, while in dogs the thyroid is 15:20 times the weight of the petuitary body. Stieda found that there was an increase in weight and volume of the petuitary body after extirpation of the thyroid gland. The enlargement consisted of vacuolation and an increase in the large cells. Stieda is of the opinion that this enlargement corresponds with an increase in function that in part takes the place of the extirpated thyroid.

Rich and Ewald (*A ch. f. d. ges. Physiol*) have found that the removal of the thyroid causes no perceptible alteration in the health of pigeons. Their work was undertaken with reference to the earlier observations of Langendorff and Ewald, in which they referred the difference in the loss of the thyroid observed in dogs and rabbits to the difference in diet. They, therefore, chose pigeons as representing a pure vegetable feeder, and found that the loss of this gland did not in any way affect the health of the animal.

It would have been of great interest in the light of Stied's communication if these later authors had observed the condition of the hypophysis in the operated birds, and the relation of this organ to the size of the thyroid in birds generally. While so much has been added to our knowledge of the thyroid in the last few years, a careful study of recent literature only shows how much regarding its functional relations still remains to be explored.

MAGGOTS IN THE STOMACH.—In the *Deutsche Medicinische Wochenschrift*, June 26, 1890, Dr. Landon, of Elbing, reports the case of a child, six and a half years old, who was attacked with vomiting and diarrhea after vaccination. The stools contained a large number of worms. The mother stated positively that the discharge of worms did not occur every day, and that these were only present in the stool and not in the vomit. The child died in eight weeks, with manifestations of extreme exhaustion. It was robust and healthy at birth, and had been fed with artificial food, flour and milk, prepared the day before using. Through carelessness and lack of cleanliness, it is possible the disease resulted from the presence of the ova of flies in the food, a condition referred to by Küchenmeister in his text book. The parasites were examined by Virchow and Chun. The latter called the larva that of the horse fly—*tabanus*—

which lays its eggs in the nasal cavity of the horse. Displaced larvæ find their way through the pharynx into the stomach and fasten themselves to the mucous membrane by means of a pair of hooks situated on the head, so that the stomach of a horse may be literally studded with the parasites. A similar state of affairs might be present in the human stomach.

Autop-sies in such cases are rare on account of the generally favorable course of the disease, and none was made in Landon's case; so that it is not as complete or as conclusive as might be wished.

SCARLATINA WITHOUT PYREXIA.—Dr. Wertheimer mentions in the *Münchener Medicinische Wochenschrift* a case of scarlatina occurring in a child seven years of age, in whom, though the eruption was well marked, and the tonsils and tongue presented their characteristic appearance, there was absolutely no pyrexia either morning or evening, the highest point reached being 99.6° F. The pulse, however, was rapid, being from 116 to 120 during the first three days. There was no albuminuria; desquamation began on the ninth day. Dr. Wertheimer also mentions a second case occurring in a child of about the same age, where, though all the distinctive signs of scarlatina were present, the only time there was any abnormal temperature was the evening of the second day; then it was 100.6°. Here, too, there was marked rapidity of pulse, and he suggests that this is probably an important sign in diagnosing the rare cases of apyrexial scarlatina. His opinion is confirmed by Dr. Beetz, who, immediately after the appearance of the article, reported two other apyrexial cases where the pulse was also very rapid.—*London Lancet*.

ACTION OF ALKALINE CHLORIDES ON CALOMEL.—As the theory of Mialhe, which affirms that calomel is decomposed by alkaline chlorides at the temperature of the body, although denied by many authors, is still taught in many chemical works, M. Adam has subjected the question, which of course is a most important one from a medical point of view, to a searching examination, and comes to the following conclusions: In contact with air at a high temperature calomel may be changed into the perchloride by the alkaline chlorides, more especially by ammonium chloride; but in the absence of air, even in the presence of organic matter, this change is so slight as to be practically nil, and unless calomel is prescribed on an empty stomach it is of no consequence whether the food taken is salted or not. He also concludes that chloride of sodium is not incompatible with calomel.—*Ibid*.

The American Practitioner and News

"NEC TENUI PENNÂ."

Vol. X. SATURDAY, NOVEMBER 8, 1890. No. 10.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the EDITORS OF THE AMERICAN PRACTITIONER AND NEWS, Louisville, Ky.

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THREE MEDICAL SOCIETIES.

On the night of the 31st ult. the Louisville Medico-Chirurgical, the Louisville Clinical, and the Louisville Surgical societies met in joint session for the purpose of good cheer and the mutual interchange of medical society opinions. Each society was represented by the best part of its actual working force; but in view of the fact that not a few of the persons present were members of two of the societies, and some of all three, the number was something less than fifty.

The proceedings were of unusual interest. Dr. John A. Ouchterlony, just returned from a tour of Europe, read an essay upon the medical practitioners, medical teachers, and hospitals of the Continent. The subject was treated in the distinguished author's best style, and was delivered to the entertainment and instruction of the Fellows. Our next issue will contain the paper in full text.

After the essay the Fellows sat down to supper at the Pendennis. The host was Dr. William Cheatham, an active member of the three societies, and president of the Clinical. The menu more than sustained this gentleman's high reputation as a contributor to social good cheer.

Under the administration of that prince of toast-masters, Dr. E. R. Palmer, the listeners were treated to numerous well-timed speeches upon matters medical but not technical. When this oratorical effervescence had subsided matters took a serious turn, and ways and means for the establishment of a physician's club or institute upon a permanent basis were vigorously discussed.

Without a dissenting voice it was agreed that the societies represented in the meeting take the initial step in what promises to be the medico-social event of the city.

A committee was appointed to take the work in hand, and the sum of \$3,500 was subscribed for the purpose on the spot. When this sum is increased, as it may easily be, to \$15,000 or \$20,000, the profession will find itself in possession of a commodious place where medical societies may meet, and medical entertainments be given under the best possible surroundings.

A library will be provided, where books, ancient and modern, may be found, and where full files of all the medical journals of the world will be at the service of the members. Such an institute must become the focus of medical influence for the region of which Louisville is the center, while the benefits derivable from it by the profession of this city will multiply with the coming years.

In view of this almost certain result, it goes without the saying that the joint session of the three societies for the year 1890 was the most important meeting of medical men held in this locality in recent years.

THE CONSUMPTION CURE CRAZE.

The paper of Dr. Robert Koch, read at the recent meeting of the International Medical Congress, which stated that his recent investigation had led him to believe that he had discovered or was about to discover a substance which would prevent or cure tuberculosis in animals, and probably in man, made a profound impression upon the medical mind; but the later statement that the specific had been successfully applied in man has spread like wild-fire through circles medical and non-medical, and now in the

secular press is dividing attention with the great political questions of the day.

If any man of less reputation for soundness and solidity than Dr. Koch were behind the scenes, we should vote the question "a nine day's wonder," but as it is we must suspend judgment and wait for the developments, which we hope will come with time. As might have been expected, the quacks (in and out of the profession) are making ready their little boats in the hope that the coming wave will carry them into the haven of public favor. The conscientious physician, however, will await the openings of the future, and put the alleged remedy to the careful test of experience before hazarding an opinion of its worth or worthlessness. No *a priori* logic will be found competent here. Our next issue will contain the full text of Dr. Koch's original paper, with comments by our Paris and Berlin correspondents.

Let us suppress enthusiasm and calmly await the *denouement*. That the stamping out of phthisis is a hygienic possibility we sincerely believe. That the disease may be arrested in its incipency is not at this date too much for professional credulity.

Notes and Queries.

HYPNOTISM AND CRIME.—The sentence in Paris, not long ago, of a hypnotist to penal servitude for procuring from a somnambulist a check for 10,000 francs brings home to us, says the New York Times, as a practical matter the possibilities for crime which the facts of hypnotism offer. A writer in the current Contemporary Review cites a number of cases which apparently show it to be possible that the greatest crimes may be committed by hypnotists, or at any rate upon hypnotized persons.

The writer in the Times adds that it sees no harm in public exhibitions of hypnotism, while the suggestion that an investigation of its phenomena be limited to the medical profession is not satisfactory; for it adds: "The attitude of the profession to the subject has not been historically very satisfactory. They have ridiculed it in the past, and the fear has been expressed that if in the future it should

be given over entirely into their hands they might turn the lock upon investigation. Such a limitation, furthermore, would be extremely difficult to carry out in practice."

Since the Times sees no harm in public exhibitions of hypnotism, but does see objections to limiting its investigations to physicians, we would submit to it the reasons for suppressing them recently set forth by the Russian medical department. It announces that, "In consideration (1) that public exhibitions of hypnotism cause considerable injury to the health of subjects experimented upon, as well as of spectators witnessing the experiments, the performances being apt to give rise to the development in hypnotized persons of various hysterical, nervous, and even mental affections, which may sometimes amount to a genuine epidemic of hypnotic mania; (2) that such public hypnotic entertainments offer to evil-minded subjects a good opportunity for studying methods of hypnotizing, and for subsequently practicing them for various immoral or criminal purposes; (3) that generally such hypnotic performances, being not accompanied by any rational explanation, can breed in the public only erroneous notions, and even implant superstitions, while post-hypnotic suggestions can constitute a source of disturbance of order and the peace of the community by hypnotized persons, and even of committing criminal deeds by the same, the Medical Council has resolved, (1) that henceforward any public *séances* of hypnotism and magnetism are strictly prohibited; and (2) that the application of hypnotism for medical purposes can be permitted solely to medical practitioners, under the condition that the operation is to be practiced invariably in the presence of other medical men."—*Medical Record*.

CORRELATIONS OF THE SEXUAL FUNCTIONS AND MENTAL DISORDERS OF WOMEN.—Barnes (Medical Press) thus concludes a paper on this subject:

I may conclude this imperfect presentment of a great theme by stating what seems to be the logical sequence of the facts and arguments set forth.

The proposition I present is, indeed, self-evi-

dent. All the resources of medicine, special and general, should in every case be brought to relieve the sick. This implies that similar direct objective investigations, as that which is pursued in the case of females suffering from sexual disorder not apparently complicated with nervous disorder, shall be made in the subjects of nervous disorder in whom there is reason to infer that sexual derangement exists.

In the first place, there is the immediate indication to seek for light as to the cause of the nervous disorder, with a view to relieve this complication. In the second place, even if the nervous disorder be found not to depend upon the sexual disorder, it is still the duty of the physician to do what he can to relieve the sufferer from this element of trouble. An insane woman has surely as much right to relief from disease of the ovaries and uterus as a sane woman has.

Griesinger (1867) speaks very decidedly upon this point. He says: "On the least suspicion a local examination should be made. It is certainly of great detriment to the patients that there exists among the asylum physicians a truly childish delicacy in regard to vaginal examinations. In Germany, France, and England I have found the same delicacy; they seem to be afraid of exciting the patients." This was said in 1867. I think the censure may now be considerably modified.

One rule I strongly urge. In every case of puerperal insanity examine into the condition of the pelvic organs. Imperfect involution of the uterus is in the highest degree probable. In addition to other factors the functions of the breasts are almost always suspended. Thus a most potent stimulant to involution is wanting. Then retroversion or retroflexion is very probable. Relief from these conditions can not fail to be beneficial, and may even bring about recovery.

Thus we see that in this inquiry the physiologist and the gynecologist meet on common ground, each enlightening the other, and both helping to build up out of the materials of their special knowledge that true science, that comprehensive medicine which holds out the best prospect for the relief of physical and mental suffering.—*Times and Register*.

EARLY RISING AND LONGEVITY.—Professor Humphrey's recent Collective Investigation Report on Aged Persons contains some very positive evidence on a matter which has already engaged the attention of moralists as well as physicians. "The opportunity for nutrition to do its restorative work was in nearly all provided by the faculty of 'good sleeping,' to which was commonly added its appropriate attendant, the habit of 'early rising.'" Thus there is a relation between early rising and longevity. No doubt many people will hastily seize upon the sentence just quoted, and employ it in edifying lectures or essays for the perusal of youth, or embody it in popular medical works. Important qualifications follow in Dr. Humphrey's report, but they are likely to be overlooked. Doubtless the habit of early rising is in itself healthy; most of all, it is a good sign of health when it evidently signifies rapid recovery from fatigue. Again, it usually denotes a strong will, the gift, as a rule, of a good physical constitution, or at least the safeguard of average bodily strength. Late risers are generally either invalids or persons of bad habits, idlers who are never free from other vices besides idleness. The nervous exhaustion which keeps a man wakeful throughout the small hours produces sleep late in the morning. This exhaustion is invariably due to one of several life-shortening influences, especially anxiety or indiscretion in diet or drink. Early rising is thus rather one effect of certain favorable influences, another result of which is longevity, than a cause of longevity. To turn a weakly man out of bed every morning at seven o'clock will not prolong his life. It will be noted that by "good sleeping" Professor Humphrey signifies quick sleeping; "that is, the reparative work which has to be done in sleep is done briskly and well." Here, again, we have an effect of a cause; but preventing a weakly subject from sleeping more than four or five hours nightly would not cause him to live long, but would rather tend to shorten his life. Equally important are Professor Humphrey's observations which show that by "early" he does not entirely mean the time by the clock. The word "has a relative significance with reference to the time of going to bed. A per-

son who retires to rest four hours after midnight and gets up at 10 A. M. may be strictly regarded as an 'early ri-er.'" Thus, early rising is synonymous in long-life histories with short sleeping, which means rapid recovery from fatigue, a sign of bodily strength. These scientific facts in nowise contradict the alleged value of early rising as a practice to be cultivated by all persons in good health. It is excellent as moral discipline, and eminently healthy as a matter of fact. Most persons will eat three meals daily. When a man gets up late those meals will probably follow each other at too short intervals to be wholesome. When he is an early riser it will probably be otherwise. He can enjoy a good breakfast, and by the time for his lunch or mid-day dinner he will have an honest appetite again.—*British Medical Journal*.

THE OLDEST FRENCH BOOK ON SURGERY. Dr. Pagel, of Berlin, has found the oldest French work on surgery among the manuscripts of the Royal Library here, and is publishing it in the *Archiv für Klinische Chirurgie*. It was written in the beginning of the fourteenth century, and its author was Henri de Mondeville. He deals in great detail with all the measures necessary for the treatment of surgical cases, and gives exact instructions for the male and female attendants. Many of these instructions afford significant glimpses of domestic life nearly six centuries ago, not only in the palaces of princes, but also in the hovels of the working people and bondsmen. The author frequently intercalates rules for the guidance of the surgeon in his dealings with patients and their relatives. He instructs his professional brethren, for instance, how to wring their fees—"salarium extorquere"—from wealthy but ungrateful patients. Passages of this kind give a vivid idea of the social position of physicians and surgeons in that remote period; they also increase our knowledge of the superstitions of that time. Besides this, the work gives a pretty complete idea of the state of surgery in the fourteenth century. Its author was one of the most eminent surgeons of his time. After studying in Paris and Montpellier, especially under Jean Pitard, he

became a professor of medicine and surgery. In 1301 he was appointed physician in ordinary to Philip IV of France, surnamed the Handsome, whom he accompanied to Flanders. He began the book in 1306, but his progress was slow, owing to the multiplicity of his professional engagements. A long delay was caused by the circumstance that he accompanied Philip's brother, Charles de Valois, as army surgeon, to Arras and England. Thus it happened that the book was still unfinished at the time the author died of lung disease, about the year 1318. Besides the Berlin manuscript, Dr. Pagel has used for his edition (the first ever published) three manuscripts belonging to the French National Library, which were lent to the Berlin Library by Leopold Delisle, the head librarian there, for this purpose.—*London Lancet*.

INSURANCE AND MURDER IN ENGLAND.—Children are now insured before they are born, and at the payment of one penny a week. This insures a sum which far more than covers the funeral expenses, and the same child is often insured in more than one office. Under such a system the father or mother may make a profit of three or four pounds on the death of a baby, to say nothing of what would be spent on food and clothes. The Bishop of Peterborough repeated a shocking phrase, which explains itself, and which would be only weakened by comment. They talk, in a town which he did not and we will not mention, of "having a little funeral and a big drink." Now, of course, it does not follow that, because these things may be done, they are done, and some optimists argue that they can not be done. There is, they say, the fear of the gallows—"S'il n'y a pas un Dieu, il y a toujours le gendarme"—and there is the doctor's certificate. To cut an infant's throat or give it prussic acid would not only be desperately wicked, but incredibly foolish. Insufficient food, and judiciously improper treatment in one or two small particulars, and the flickering light is effectually quenched. "Would any of your lordships," asked the Bishop, "be willing to intrust a child of yours to a sick nurse who had a pecuniary interest in its death?" A medical man

wrote to the Bishop of Peterborough to say that he had for some time insisted on an inquest whenever an insured child died. What happened? He appeared as a witness, and was asked if he could swear that the child would have lived if it had been properly fed. He could not, and the verdict was "Death from natural causes," avoiding at least the awful blasphemy of "Died by the visitation of God."—*The Saturday Review*.

AFTER laughing at Chinese warriors for several centuries for their use of stinkpots as weapons in battle, Christendom has suddenly awakened to the fact that there may be something in the idea. "In a sham fight at Portsmouth an advancing column was so affected by the fumes of the smoke-ball, which was used to raise a cloud of impenetrable obscurity under which they could advance, that the men had to keep their hands to their noses to avoid suffocation. It is now proposed that the smoke-ball shall receive a further development. It has occurred to some military men that instead of half suffocating their own troops it would be better to follow the example of the Chinese pirates with their stinkpots, and asphyxiate the enemy. A Vienna scientist has accordingly invented a bomb of such power and virulence that every one who is within a certain radius of it when it explodes is rendered unconscious. Devices such as these would soon modify the art of war, and probably the next development will be an anti asphyxiating bomb whose fumes will neutralize those of the other. It is said that many years ago a scheme based on the throwing of poisonous gases over a tract of country was put before the war office in England for the purpose of devastating the country in the face of an invading army, but the agency employed was so terrible in its effects that it was not made public and was consigned to the secret records of the war office."—*Chicago Daily News*.

ADULTERATION IN FOODS AND DRUGS.—Dr. Newton, Dairy Commissioner of New Jersey, reports for the past year that of 2,507 articles of food analyzed, 1,102, or 43.96 per cent, were adulterated. While all the Ameri-

can canned goods examined were found in good condition and free from metals or other dangerous ingredients, 88 samples out of 107 foreign canned goods were adulterated, the chief adulterant being copper, which had been added to give a green color. Three fourths of the samples of extracted honey analyzed were adulterated with glucose or cane sugar syrup. More than half of the molasses specimens were adulterated with molasses or cane sugar, and what was sold for molasses was glucose and contained tin. Seventy per cent of the pickles contained copper; seven samples of baking powders contained alum; raspberry syrup contained no raspberry, but in its stead an artificial ethereal flavoring essence colored with an aniline dye; and sausages were dyed with Bismarck brown and garnet red, and coated with a varnish composed of shellac, resin oil, and alcohol. Jellies, however, bore off the palm. Of 192 samples, 159 were adulterated; starch, water, acetic acid, currant flavoring extract, glucose, and coloring matter masquerading as currant jelly. In Philadelphia one manufacturer sold thirty-nine tons of this stuff in a single week while another delivered one thousand tons in six months. Fifty factories are engaged in this business in this country.

Of the drugs examined, 64.55 per cent were found adulterated or not equal to the standard. The fraudulent list included cream of tartar, opium, paregoric, iodide of potassium, seidlitz powders, spirit of nitrous ether, laudanum, and tincture of chloride of iron.—*Brooklyn Medical Journal*.

BAD BREATH.—Dr. Frank H. Gardner, in the Dental Review, speaks of the causes of bad breath. He concludes: First, decaying particles in the mouth as far back as the pharynx-vault taint the breath, if exhaled very little if at all. Second, mouth-breathers have a bad breath when the tonsils are enlarged or when cheesy masses exist in the tonsillary mucous folds. Third, certain gastric derangements taint the breath only when gases are eructated through the mouth. Fourth, the principal cause of bad breath is decomposition in the intestinal canal, the retention of fecal matter in the transverse and descending colon, and

the absorption of gases into the circulation, finally exhaled by the lungs. Fifth, catarrh, nasal, pharyngeal, or bronchial, causes bad breath. Sixth, medicines or ailments which undergo chemical changes below the esophagus may, by rapid exhaustion through the stomach walls, or immediately below, give to the breath the characteristic odor. Bad breath is often a source of serious annoyance to the patient, and the fact that it has more than a local cause is too often ignored by the physician, who therefore fails to cure it.—*Weekly Medical Review*.

REMEDIES FOR NEURALGIA.—Writing to the Provincial Medical Journal regarding the use of new synthetic remedies, Dr. T. P. Thomson states that antifebrin is infinitely a more effectual pain-reliever than antipyrin; the dose is small, and it is not very expensive. Three or four grains in a little brandy or whisky, and then a little water added to this mixture, is the best way to give it. Repeat in four hours, if necessary. Dr. Thomson has never witnessed any bad, depressing effect from the employment of antifebrin. In neuralgia of the head it gives sure and speedy relief. In any given case of nerve pain, where one might suspect a weak or fatty heart, phenacetin is to be preferred to antifebrin, but it does not seem to act quite so surely as the latter. Phenacetin in seven or eight-grain doses every four hours is a safe and effectual remedy in all neuralgias, be they in the head, back, or any other part of the body. Exalgine he has also found useful, and quite corroborates Professor Fraser's statements regarding its efficacy.—*Chemist and Druggist*.

[Let him try this or any other coal-tar derivative on a case of genuine tic, and then proceed gracefully to haul in his therapeutic antlers.—ED.]

BACILLARY PARTNERSHIPS—In the course of some experimental investigations on the relationship of micro-organisms with diseased conditions, Drs. Cornil and Babès have discovered that a certain affinity exists between particular species. In other words, the development of special varieties may be facilitated, or the reverse, by the presence or pre-existence of

certain other varieties. In this way the occasional complication of an existing infectious disease by a second is not the result of mere chance, but is governed by some still undefined conditions of environment. In other instances this association of two or more species of micro-organisms is necessary to the evolution of the malady. This association is the rule in the infectious diseases of human beings, and it is often the secondary infection that determines the fatal issue. This partnership arrangement may take place between microbes belonging to more or less nearly related species, as in the case with the organisms of pneumonia and typhoid fever. Or there may be streptococci and bacilli together, as in diphtheria, or several varieties of streptococci, as in the infection of wounds. In fact, there is a large selection of these associations, some invariable, others frequent, and a third category in which the secondary infection is accidental. These facts may possibly throw some light on the rhythm and sequence of the symptoms in the infectious diseases.—*Medical Press*.

BLUE-GRASS ENDURANCE.—Professor N. Shaler, in his ethnographic researches, sought the record of a body of troops whose ancestors had been for many generations upon American soil, and he found it in the first brigade of Kentucky troops (Confederate). In Scribner's for November he says: "On May 7, 1864, this brigade, then in the army of General Joseph Johnston, marched out of Dalton 1,140 strong at the beginning of the great retreat upon Atlanta before the army of Sherman. In the subsequent hundred days, or until September 1st, the brigade was almost continuously in action or on the march. In this period the men of the command received 1,860 death or hospital wounds, the dead counted as wounds, and but one wound being counted for each visitation of the hospital. At the end of this time there were less than fifty men who had not been wounded during the hundred days. There were 240 men left for duty, and less than ten men deserted. A search into the history of warlike exploits has failed to show me any endurance of the worst trials of war surpassing this."

TOXIC EFFECT OF CALOMEL IN THE PRESENCE OF CHLORIDES OF THE ALKALIES.—Adam (*Nouveaux Remèdes*) confirms the statement of such authorities as Moll, Hervé, Guibourt, Larocque, Jolly, and others to the effect that within the body calomel does not, to any appreciable extent, go into solution as sublimate. M. Mialhe's assertion that it does, and that the agent in effecting this is sodium chloride, is still current doctrine. Dr. Adam's experiments were made both in the absence and presence of organic matter. In either case only traces of mercury went into solution, provided that there was not free access of air. In the presence of air a considerable quantity of mercury was dissolved. The author claims that within the body the access of air is practically *nil*. Besides experiments outside the body, others were made on the living animal which confirmed the above negative statement.—*British Medical Journal*.

A MEDICAL MONOPOLIST.—The little island of Heligoland is an exceptional bit of territory in many respects, among others in this, that never in the recollection of the "oldest inhabitant" has it been the seat of professional jealousies. Why is it so favored? Because only one medical man (dentist, surgeon, general practitioner, all in one) is to be found the length and breadth of the island. No sooner, however, had Germany taken possession of her new appenage than this delightful state of things seemed destined to come to an end. An announcement appeared in the Heligoland Gazette stating that a second German M. D. would shortly take up his residence in the island. Of course the Heligoland doctor was up in arms at once. He appealed to the new governor, quoting the Emperor William's dictum that the rights and privileges of the Heligoland-ers were to be respected and to remain unchanged "for the present," and the result is a decree leaving him in undisturbed possession of the sole right of practice in the island.—*Ibid.*

EXECUTION BY ELECTRICITY.—Dr. C. F. MacDonald, President of the State Commission in Lunacy, on October 8th made a report to

Governor Hill, of New York, on the execution of Wm. Kemmler. He asserts that death was sudden and painless, and that despite all hostile criticism the first execution by electricity was a successful experiment, and will be regarded in the future as a step in the direction of a higher civilization, being infinitely preferable to hanging.

He recommends that there be but one electrical plant, located in the center of the State, with a competent electrician in charge; that there be especially constructed apparatus of at least 3,000 volt power, which will do no injustice to any electrical lighting company, as would be the case with commercial dynamos; that the voltage employed should not be less than 1,500 nor more than 2,000; that a careful record be kept of every point, and that an official report to the Governor be made within ten days after the execution.—*Med. and Surg. Reporter*.

DEATH FROM NITROUS OXIDE.—A death from nitrous oxide is reported from Montreal. A man, aged twenty-four, went to the office of a dentist to have a tooth extracted, and requested to have the gas administered. After assuring himself that the patient was not suffering from heart or lung disease, the dentist administered the gas. No sooner had the tooth been extracted than the patient gave a gasp and fell over in the chair. He was placed upon the floor and artificial respiration performed, but without restoring animation. The patient was not under the influence of liquor, and five hours had elapsed since last taking food (breakfast). The purity of the nitrous oxide was tested shortly after the accident by the president of the dental association, Dr. Beers, who himself inhaled it from the same inhaler. The verdict of the jury was that the man died from syncope, caused by the administration of the gas, and they exonerated the dentist from blame.—*Druggists' Circular*.

EPILEPSY OF NINE MONTHS' DURATION FOLLOWING DENTAL CARIES.—M. Bakowski reports the following cure of reflex epilepsy: He was called on the 15th of May, 1889, to attend a young girl of sixteen years whom he found

in an epileptiform attack. Notwithstanding varied treatments (bromide of potassium, quinine, arsenic) the attacks continued; they were accompanied by loss of consciousness and were repeated several times a day. At the end of the month of December, 1889, M. Bakowski had his attention attracted to the teeth of his patient. The first upper molar on the right and the first inferior molar on the left were decayed. The patient did not suffer from the above, but immediately before each attack she experienced a sort of a disagreeable sensation (*aura epileptica*). These teeth were removed, and since this time the attacks have no longer returned. This cure has now continued for six months.—*La Bulletin Médical*.

FATAL DYSPNEA DUE TO A CASEOUS GLAND. The patient was an infant in arms, and previously to the onset of the dyspnea was believed to be in perfect health. Suddenly, and without any obvious reason, the baby was seized with urgent dyspnea. On admission, the house surgeon explained the dangerous condition to the mother, and that tracheotomy might be necessary at any moment. The mother, however, would not consent to any operation without first consulting her husband, and went away for this purpose. Meanwhile the dyspnea became extremely urgent, and tracheotomy was performed by the resident medical officer without the parents' consent. Some temporary relief was afforded; but a foreign body which was believed to be the cause of the trouble could not be found, nor any other satisfactory explanation for the dyspnea. The child died within one and a half hours of the commencement of the attack. At the *post-mortem* examination a caseous gland, which had ulcerated its way into the trachea, was found just above the bifurcation, occluding one bronchus entirely. There had been no symptoms to attract attention to such a condition.—*Medical Press*.

CHOLERA.—Surgeon J. H. Tull Walsh gives, in the Indian Medical Gazette, July, 1890, the results of the use of salol in the treatment of cholera. By studying his statistics it seems clear that a miscellaneous treatment, with stimulants and astringents, gives better results than

the solal treatment. There is, however, reason to believe that the cholera was of a milder type in 1889 than during the early part of 1890, which would in some measure account for the difference in the percentage of deaths. He does not attempt to discuss the general question of the treatment of cholera, as he is of the opinion that after the algid stage is reached recovery depends in some way on the vitality of the patient, and is generally independent of drugs. Universal and perfect sanitation should, Dr. Walsh thinks, be the only end and aim of those who desire to see the mortality from cholera lessened.—*Med. and Surg. Rep.*

FOR DIABETES (Porter, Southern Medical Record):

Fel. bovis inspis. }āā gr. xl;
Quininæ sulph. }
Ext. nucis vomicæ.... gr. vj;

M. et in capsul. No. xx divide. S: One before each meal.

Ext. hyoseyami fl..... ʒiij;
Ext. damia: æ fl..... ʒvj;
Potassi bicarb..... gr. xl;
Mucilaginis..... ʒss;
Aquæ..... ʒij.

M. S: ʒj every three hours.

Restriction of the quantity of food is more essential than of its quality.

It was reported from Madrid October 12th, that the cholera epidemic continued at Barcelona, and that a special hospital had been erected there for the sufferers.

SPECIAL NOTICES.

DIPHThERIA.—Dr. Pirnat orders the following preparation as a gargle:

R Acid carbol..... ½ dram;
Extract eucalypti fl 10 drams;
Kennedy's ext. pinus canadensis... 2 oz;
Glycerinæ..... 2 oz;
Aquæ q. s. ad 8 oz.

M. Sig. Gargle well every two hours, for ten minutes each time, before taking the medicine.

W. C. JONES, M. D., Yorktown, Ill., says: Have found that *H. S. Kennedy's Extract of Pinus Canadensis* is a remedy of superior excellence in gonorrhea. It seems to be a true specific. I first used it in a case which had withstood the action of our most popular remedies. Immediate relief and cure followed from the local use of *S. H. Kennedy's Extract of White Pinus Canadensis*.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., NOVEMBER 22, 1890.

No. 11.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

VESICAL CALCULI IN THE FEMALE REMOVED THROUGH THE URETHRA.*

BY W. O. ROBERTS, M. D.

Professor of the Principles and Practice of Surgery, University of Louisville.

This paper is devoted chiefly to my individual experience in the extraction through the urethra of stone from the bladder of the female. The cases thus treated were six in number. The ages of the patients ranged from fifteen to fifty-six years. Four were married, but two only had borne children. The stones were phosphatic in four cases, uric acid in one, and an encrusted foreign body in another. In two the bladder symptoms had been preceded by attacks of renal colic; in one (very hysterical) the stone had for its nucleus a piece of soft wood; in one the patient had had a vesico-vaginal fistula, which had been closed by an operation some months prior to the occurrence of the symptoms of stone; in another the bladder had been opened by the surgeon in doing an ovariectomy upon the woman a year before the stone was discovered. This case presented a peculiar feature. This was an eczematous eruption in and around the abdominal cicatrix, which appeared directly after the occurrence of bladder symptoms, and which was noticeably affected by the condition of the bladder. This eruption was not influenced in the least by treatment, but disappeared without treatment soon after the stone was removed. In four of

the cases the stones were single; in one there were two, and in another nine. In this case the patient had passed, at various times, a number of small stones, from two to seven at a given micturition. These stones varied in size from that of a grain of wheat to a grain of coffee. In two years she had collected 184 stones, a number not representing all she had passed. The extraction was done in every case under chloroform, the patient being profoundly anesthetized. The urethral dilation was begun with forceps and completed by means of the fingers, the little finger being first introduced, the ring finger next, and finally the index finger. The fingers were well oiled. In Case 2 the stone was found to be almost an inch and a half in diameter. This being thought too large for safe removal in its entirety, was crushed with the lithotrite and taken away piecemeal. In Case 4 the stone was found in the urethra. It proved to be a piece of soft wood heavily incrustated with urinary salts. In Case 3 the stone was spherical and had a diameter of about one half inch. In Case 1 the stone was an ovoid, its long diameter being an inch, the shorter three fourths of an inch. In Case 5 there were nine stones, the smallest measuring circumferentially two and two and a fourth inches; weight, eighty-four grains. The largest measured three and one fourth inches in the greater, and three in the lesser circumference. Its weight was two hundred and five grains. The aggregate weight of these stones at the time of their removal was one half pound. In Case 6 there were two stones. The smaller was about the size of a filbert, and the larger of the size of an almond. The smaller was removed in its entirety, but the larger broke under the pressure. Incontinence of urine followed the operation in two only of these cases, and in these the trouble was temporary, lasting

*Read before the Southern Surgical and Gynecological Society, November, 1890.

three weeks in Case 2, and about a month in Case 5. In Case 2 the lithotrite had been used. Case 5 was in the person of the woman who had passed so many stones during a period of several years. This patient had a urethra of large caliber, and partial incontinence of urine existed prior to the operation. Had it not been for the existing partial incontinence and the patulous, freely dilatable condition of the urethra, the attempt to remove these stones through this avenue would not have been made.

CASE 1. This patient I saw with Dr. William Carter, of Louisville, Ky., in March, '78.* She was a negro girl fifteen years old. She had been suffering with bladder symptoms for about two years. These symptoms had been preceded some time by a very severe attack of colic, during which she had a convulsion. At the time I saw her she was greatly emaciated and appeared to be in constant pain. Some urine voided while I was in the house was very thick with pus and mucus, and was strongly ammoniacal. At a previous visit Dr. Carter having detected a stone, we decided to operate at once. After dilating the urethra with forceps, I passed my little finger, well oiled, into the bladder and felt the stone. It was an ovoid and not considered too large to be removed in its entirety, so it was grasped with the forceps and carefully extracted. It proved to be a uric acid calculus, its shorter diameter being about one half, and its longer three quarters of an inch. While the meatus was somewhat lacerated during the operation, no incontinence followed.

CASE 2. Mrs. M. was admitted to the City Hospital with the following history: Aged thirty-five years, married, mother of three children, the youngest two years old; last labor very severe and tedious, continuing two days. It was followed by a vesico-vaginal fistula. Some months later this fistula was closed by an operation. Shortly after the closure of the fistula she began suffering from frequent and painful micturition. She was treated for months for cystitis, but getting worse instead of better she came to the hospital. She presented the symptoms of chronic cystitis. Examination revealed a soft calculus. It appeared to be more than an inch and a half in diameter, and hence, not considering it safe to attempt its removal

through the urethra, I crushed it with the lithotrite and took it away piecemeal. It proved to be a phosphatic calculus. In this case there was incontinence, lasting for a period of three weeks following the operation.

CASE 3. I saw this patient with Dr. Fouts, of Jeffersonville, Ind., in December, '80. She was thirty years old, married, and had two children. Her health had been excellent until some time in the previous April, when she had a severe attack of colic lasting nearly all day. This was soon followed by bladder symptoms. At the time of my visit she had a chronic cystitis. The urine was loaded with pus and mucus, and was strongly ammoniacal. Examination revealed the presence of stone. Her bladder was washed out thoroughly once daily with a hot boric acid solution for several days before the stone was removed. The calculus was phosphatic and spherical in shape, with a circumference of one and a half inches.

CASE 4. Mrs. H., aged twenty-five years, married two years, no children, very hysterical. I saw her with Dr. Eddy, of Finchville, Shelby County, Ky. She had been suffering from bladder symptoms for some weeks. When I reached her she was in a convulsion. I was told that just before the convulsion came on she had made frequent and fruitless attempts to pass water, and seemed to be in great agony. She was immediately chloroformed, and upon examination I discovered a foreign body in the urethra, which, when removed, proved to be a piece of soft wood incrustated with urinary salts.

CASE 5 I saw in April, '88, with Dr. Mitchell, of Canton, Ind. The history, as furnished by the patient, was about as follows: She was fifty-six years old, had married early in life, but had never been pregnant. Her health had been always good until '79, at which time the menopause occurred. Since then she had not, as she expressed it, seen a well day, suffering more or less all the time with pains in her back, through the pelvis, and down the left thigh. The bladder trouble dated back about three years. After having had symptoms of cystitis for several months she passed a calculus about the size of a grain of wheat. For the following two years the bladder symptoms grew steadily worse, and she would pass every few weeks from one to

seven calculi at a given act of micturition. Nine months before I saw her her condition was such that she was forced to keep her bed. From the date of the passage of the first calculus to the time of her taking to bed (a period of two years) she had collected 184 calculi, and the number did not include all that she had passed. At the time of my visit she was quite feeble and greatly emaciated. She complained of pain and soreness in the region of the left kidney, along the corresponding ureter, over the bladder and down the left thigh. There was very frequent and painful micturition, the urine being thick and strong. Examination revealed no enlargement of the left kidney, but there was marked tenderness over that region. Drs. Mitchell and Wilson had examined the bladder a few days before and found the stones. The patient was anesthetized before being put upon the table. The urethra was found to be so large that very little stretching was necessary to enable me to introduce my finger within the bladder. When the finger entered the bladder it felt very much as though it were in a bag of marbles. Extraction of the stones was easily accomplished with the forceps. There were nine of them, the smallest weighing eighty-four grains and measuring two inches in its smallest circumference and two and a half in its greatest. The largest weighed two hundred and five grains. Dr. Mitchell wrote me six weeks after the operation that the patient's condition began to improve from the time the stones were removed, that she was out of bed in two weeks and had control of the bladder within a month, but still complained somewhat of her left side. He promised to advise me if she should ever have any further trouble, and not having heard from him I take it she is still doing well.

CASE 6. This patient was operated on at St. Joseph's Infirmary in July last. Drs. Rodman and Pearce assisted me. She presented the following history: She was twenty-eight years old, married two years, but had never been pregnant. In January, '89, she had a large ovarian tumor removed. The morning of the second day following the operation her gown, bed, and the dressings of the wound became saturated with urine. When the dressings were removed urine flowed from the lower end of the wound.

Under frequent catheterization the escape of urine through the wound became scant, but there continued to be some oozing for several weeks. The wound did not heal entirely for about two months. She had no further trouble with her bladder until February, '90, when she began suffering from symptoms of cystitis. Soon after the occurrence of these symptoms an eczematous eruption appeared in and about the cicatrix, which caused her great discomfort. She soon noticed that the condition of the eruption was influenced by the condition of her bladder. When from undue exercise or other cause her bladder symptoms became aggravated this eczema would be very annoying, and it would disappear almost entirely when the bladder symptoms were not severe. Treatment did not seem to influence it in the least. When I saw her, immediately upon her arrival at the infirmary after a tedious journey, the surface involved a space about the size of the palm of my hand, was quite red and indurated, and scattered over it were a number of vesicles and superficial ulcers. The bladder symptoms had been greatly aggravated by her trip; the urine was loaded with pus and mucus, and it was strongly ammoniacal. After some days of preparatory treatment the stones were removed. There were two, one about the size of a filbert, and the other as large as an almond. The latter broke when grasped with the forceps and was removed in pieces. The eczema disappeared without treatment soon after the stones were removed.

Authors agree that only stones of small size should be removed through the female urethra, because of the danger of subsequent incontinence of urine.

Agnew: "When a stone exceeds one inch in diameter, it is not best to remove it through the urethra."

Erichsen: "Eight to ten lines in diameter are the sizes of stones that may be safely removed through the urethra."

Sir Henry Thompson: "Dilatation should never be employed for any calculus larger than a small nut or a large bean in an adult, which limits its application to very few cases."

Bryant: "In children a stone three fourths inch in diameter, and in adults one of one

inch may be fearlessly removed from the bladder by rapid dilatation and extraction, the patient being under the influence of chloroform." He states that he has removed a stone two inches in diameter without any injurious after-effects.

Keyes limits the operation to stones not above three fourths of an inch in diameter.

A better *resumé* of this operation perhaps can not be found than that contained in Albert's *Lehrbuch der Chirurgie*, page 109, a translation of which is here submitted :

"Section for stone in women is very seldom done for obvious reasons, nevertheless several methods have been given. Celsus speaks of a section between the urethra and pubes: *inter et os pubis incidendum est*. Lisfranc proposed to prepare a way through the vestibule on to the anterior wall of the bladder, which was then to be opened by a longitudinal or vertical section. But a stone which can go between the pubic bones in this manner can be crushed, and the method is superfluous; it is also bloody and difficult. Methods of lateral section have also been given which it is unnecessary to mention here, as they are so infinitely inferior to the vesico-vaginal section, which is the operation *par excellence*.

"The advantages of the last named method consist in its easy performance, in the small amount of cutting and wounding, and the possibility of the immediate application of sutures. Aveling records but one death in thirty-four cases.

"If the room allowed for the section is small, the incision must be a T shaped one; if the edges of the wound are much crushed, a vesico-vaginal fistula may result, which can be operated on later. There are, however, cases where the stone is so large that it can not be gotten through the pubic opening. Then supra-pubic cystotomy must be performed, and is done exactly as on men. It is worth attention to notice these cases where cystoceles have been opened in order to extract stones from them. Rousset long ago mentioned such a case, where a vaginal cystocele was opened and eleven stones extracted with favorable termination." (*Same book*, page 134, vol. 4.)

Other conditions exist in women than in men, as the shortness and dilatibility of the

urethra, "get-at-ableness" (a new word coined by Dr. I. N. Bloom) of the bladder, and the great tolerance of the female bladder.

"As to the methods of operation there is no unanimity among physicians, but the following principles govern most of them, to wit: In stones whose diameter does not exceed two centimeters it is best to extract through the dilated urethra. In dilating we mean by means of blunt instruments; incision into the urethra and neck of the bladder to aid dilatation is to be discarded, as incontinence readily follows (seven times in seventeen English cases).

"In stones whose diameter is between two and three centimeters do a lithotripsy and draw out the largest fragments. If the stone is too hard or larger than three centimeters it can be extracted, unless it is very large, through the vesico-vaginal section. We go pretty far with this method, as we can break up a stone that is too large from the vaginal incision, but great care must be taken not to crush edges of the wound.

"If the stone is so large that no space is left in the bladder for instruments to crush it through the vesico-vaginal wound, *sestio alta*, commonly called supra-pubic cystotomy, remains. Walsham agrees with this, advising first a trial of vesico-vaginal section, and if the relationship between it and the stone is disproportionate proceed to the supra-pubic.

"The methods mentioned can be produced also in girls under fifteen years of age. The gradual dilatation of the urethra was successfully practiced in fourteen out of fifteen cases without evil results. In seven cases where quick dilatation was practiced incontinence occurred in two cases. Vesico-vaginal section was completely successful in eight cases. In two incontinence remained, once because the wound was crushed, and once because the urethra was injured." Winckel (*same book*, page 48).

"It has been proven for many years that the female urethra was susceptible to great dilatation, that large calculi pass through it, and many cases were known where coition was carried on through the urethra.

"Artificial dilatation of the female urethra for the extraction of calculi had been known for a long time. Celsus knew of it, also Peter F.

and Fabriz Von Hildece. Warner passed his fingers into the bladder to determine the nature of a tumor. Porter used sponge tents to dilate a urethra in order to extract a foreign body with his fingers. Astley Cooper extracted five stones after first dilating the female urethra.

"But for diagnostic purposes, Hybord, in 1872, and Heath, in 1874, were the first to propose dilatation, and soon after Simon published his researches and experiences in this field. Simon's method of dilatation was as follows: The patient was chloroformed and placed in the lithotomy position; the edges of the external orifice of the urethra, being the narrowest and most unyielding part, were incised on each side one fourth of a centimeter deep and one eighth of a centimeter long. By this means the urethra was made one half to one fourth a centimeter shorter and more readily passable for thick dilating instruments.

"The instrument which he used for dilating consisted of a cylinder urethral speculum exactly on the style of the vaginal hard rubber specula. These have a wooden obturator and come in seven different sizes, according to their thickness. The length of each instrument is about six and a half centimeters; the thickness of size of first is about nine millimeters, and number seven two centimeters.

"Number one is passed into the bladder with a rotary motion, and then withdrawn, and successively higher numbers are used. When the speculum has entered the bladder and the obturator is withdrawn the urine flows out, the bladder contracts, and the posterior wall lies against the opening of the speculum and can be thoroughly inspected by moving the speculum around. In this way a large portion of the bladder can be examined.

After the speculum has been withdrawn the finger can be inserted and the greater portion of the bladder can be palpated. This palpation can be rendered much easier by not shutting up the middle finger when the index finger is in the bladder, but placing the middle finger in the vagina during the examination, while the other hand is placed above the symphysis, pressing the bladder down.

"Simon claimed the following advantages for this method: Diseases of the bladder, mucus

membrane, defects in the vesico-vaginal wall, foreign bodies and stones, tumors, their seat and extent, can be accurately diagnosed. Foreign bodies can be extracted, renal calculi can be released from the ureter, tumors can be extirpated. The mucous membrane of the bladder can be touched with caustics. Hematomata can be opened when there is an absence of the vagina, and recto-vesicle fistulæ can be touched with caustics. As a matter of fact, the method was found valuable in some cases, as foreign bodies and stones, whereas in others, as catarrh of the bladder, fissures, etc., the results were not so uniform.

"Certain disadvantages soon became apparent. A sudden stretching of the sphincter often caused paralysis of the same. Silbermann found that incontinence followed eight times in forty-eight cases. Teale claims that the sphincter muscle resumes its power in many cases after several weeks or months. We must also remember that in other cases, which have been reported as cured, the after effects were not sufficiently closely observed. In the first few days after the operation incontinence may not be noticed, because reactionary swelling serves the same purpose as the sphincter muscle. In three cases reported by Teale, where a previous kidney disease existed, death followed soon after the operation. This would seem to indicate that the operation increases the nephritis.

"Simon used to practice his method of forced dilatation very frequently, and used to demonstrate it on doubtful subjects, because he was convinced of its absolute harmlessness; but that it is not so harmless has been proved by facts. A permanent incontinence is a terrible thing and it is unjust, to run the risk of producing one for the sake of making a diagnosis.

"If we could be certain that slow dilatation avoids this risk, a rapid dilatation would have to be given up. Pippingsskoeld proposed to dilate slowly by inserting into the urethra three or four laminaria tents to produce slow dilatation. In this way, as observed by Weinlechner, the tearing of the mucous membrane is avoided.

"The author prefers vesico-vaginal section to forced dilatation. The incision can be closed by sutures, and in case complete union does not

take place, and a vesico-vaginal fistula remains, it is just as likely to heal spontaneously as is the wound in lithotomy. And even should it not heal spontaneously, and the fistula remain, in the present state of our medical knowledge we are much more liable to cure it by a second operation than we are to cure incontinence of the urine."

REMARKS SUGGESTED BY ROBT. KOCH'S LATEST ANNOUNCEMENT.

BY EWING MARSHALL, M.D.

Assistant to the Chair of Principles and Practice of Medicine and Clinical Medicine, University of Louisville.

Wise indeed is the suggestion of the great professor that the world remember that his hypothesis is as yet unproved, for much evil must in any event necessarily accrue.

First: From the undue excitement produced in the minds of an expectant people, since in proportion to the urgent need of the remedy will be the evil effects resulting from the febrile condition produced by this premature announcement.

Second: There would necessarily, after it had been thoroughly tested, be an injurious delay before the lymph and apparatus required could be brought to bear upon the cases, 500,000 to 600,000 phthisical people, as stated by Dr. John S. Billings, of Washington, D. C., existing in the United States alone.

Third: Of course if its efficacy had been proved—I do not pretend to say a word against the probability of its proving true, but speak only of the facts as the American public is made conversant with them by the cable messages published in the daily papers—this injurious delay would sink into nothing in comparison with the certain relief that would follow.

Fourth: But it has not been proved; and until it has been beyond the shadow of a doubt, the question is open to discussion *pro* and *con* by the medical mind.

It may not be out of place to mention in a superficial manner some of the supposed processes effecting the action of germs:

First: The receptive condition of the organs to be affected is strongly contended for by most authorities. Certain conditions are necessary

for germs to obtain a foothold. These conditions vary with the class of germ.

Second: According to Pasteur's division, there are *aërobius* and *anaërobius* germs. To the *anaërobius* germs oxygen is not only unnecessary, but is positively injurious. Pasteur also claimed that, although the *aërobius* germs require oxygen in a certain quantity, yet they are injured or killed by it when it is in excess.

Third: Pasteur announced some time since that one of the principal actions of the germ is the abstracting of oxygen from the tissues.

Fourth: Some claim that the destructive effects which are credited to the germs are really produced by the alkaloids of putrefaction called ptomaines.

Fifth: Some say that the results of the germ may prove destructive to itself.

Now, what if we arraign the hypothesis propounded by Robert Koch before the medical bar? Let us call the reader to the judge's chair and ask the privilege of stating the case before him.

Necessarily we must admit that the conditions are unfavorable to a just finding with reference to the value of Prof. Koch's hypothesis, for in the first place he himself states that it is as yet unproved, and in the second place the evidence at hand is only what has appeared in the secular press, though much of it claims to be reported *verbatim* from the lips of the great experimenter, or from one of his chosen assistants; still it must as yet be classed as circumstantial evidence and must be strong indeed to controvert even the present proof of a theory that is longed for with so much anxiety.

HIS CLAIMS.

1. That, following the injection of the new substance, there is an almost immediate marked exacerbation in all of the symptoms attendant upon the second and third stages of tuberculosis; *i. e.*, increased frequency of respiration, rise in temperature, these effects followed by increased coughing and expectoration

2. That it does not destroy the germ, but destroys the condition of the tissue necessary to its life and procreation.

ANSWER.

1. From these statements the conclusion must be drawn that by his injection he increases the degenerative changes that have already been instituted by the bacillus, and necessarily causes an increase in the cough by the increased irritation and of the expectoration, as there is so much more broken-down tissue to be removed.

2. He claims no effect upon the germ directly, and if the necessary morbid changes in the tissue recur soon enough it will again become active.

3. He states emphatically that often after one injection the bacillus disappears completely from the sputum of a tuberculous patient.

4. That it relieves permanently lupus, tubercular involvement of the joints, etc.

5. Twenty cases of pulmonary tuberculosis have been under this treatment for seventy days, with the following results, as stated by the experimenter himself, viz: "In fifteen of these patients the bacilli have completely disappeared from the sputa. The patients have gained much in weight, in general appearance and in spirits, which last is not to be a neglected symptom. In the remaining five cases, I regret to say, there is not the slightest indication that the ordinary course of the disease has been stopped."

3. If he destroys its home and denies it its necessary nourishment, it will cease to multiply. If this cutting off of supplies lasts long enough the germs must be destroyed.

4. Its action in destroying the conditions for the multiplying of the germ externally would be similar, if not identical, with its internal action.

5. Twenty cases treated under any of the facts that have lived their little day in the last ten years, according to the statistics of the different experiments, would show a greater percentage of improved cases after the short trial of only seventy days.

What wonders have been claimed for the different inhalers, pneumatic cabinets, steam atomizers loaded with different drugs, hot-air treatment, turpentine treatment, gases introduced by the bowel, etc., as I might go through the past and find the different panaceas that ruled in their day and received a certain following.

Now in the way of a summary, before the case is submitted to you for your unbiased judgment, dismiss for the time being the principal actor's worth and reliability, and likewise remember you are not deciding as to the probability of his ultimately proving his theory, but that we are only sifting the evidence as given by the public press.

In other words, if you or I had performed such experiments, what would be your conclusion from the facts as claimed to be stated by the great Koch himself?

Have we not all seen case after case of tuberculosis untreated have stages of great decline in all the symptoms?

Have we not, when the laws governing regimen are followed with reason—I mean when, humanly speaking, a pure air is breathed in large quantity by following conscientiously well-directed out-door exercise, eked out by some specially selected in-door exercise, and assisted by the taking of a large amount of the most nourishing aliment, even though no drug is used in addition—still have we not seen the most wonderful results follow such action?

Have we not seen the cough lessen rapidly,

the expectoration become almost *nil*, the appetite improve wonderfully, a sense of general well-being restored, and, as to the patient's spirits, it is the nature of consumptives to never realize the seriousness of their condition, and always to attempt to explain away any exacerbation by some natural cause that is temporary, and promise that when its effects pass away they will be relieved.

Brief notes of a case may be permitted a place here as illustrative of the preceding remarks:

A patient came to me from Birmingham last January. Examined January 14, 1890. Found evidence of deposit in left lung; exaggerated respiratory action in left scapular region, accompanied by a few mucous râles; sputa examined and reported to be loaded with bacilli. Weight, January 14th, 104 pounds. She rapidly gained in weight; at the same time a corresponding general improvement occurred. She was weighed February 3d, and had gained seven and one half pounds in twenty days, going from 104 to 111½ pounds.

Two weeks ago I heard indirectly from the doctor that is her physician in Birmingham, and he stated "she was getting along splendidly." She wrote last week, "I am perfectly well now and attend to all my duties." If we can do as much in the general run of cases even in the third stage of tuberculosis as he can in cases that have advanced only to a certain degree, and if we can, as I have seen it occur over and over again, have patients greatly improve even in the advanced period of the third stage, where Dr. Koch says his remedy is powerless, is it too much to claim that masterly management of the regimen promises more than Koch's discovery by the facts concerning it as we know them?

LOUISVILLE.

It is reported that Dr. Roberts Bartholow has resigned the chair of materia medica and therapeutics at the Jefferson Medical College, and this is said to be on account of incapacity caused by overwork.

OSMAN, of Cavallovit, Turkey, is said to be one hundred and sixty years old.

Societies.

SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

Third Annual Meeting, held in Atlanta, Ga., November 11, 12, and 13, 1890.

FIRST DAY—MORNING SESSION.

The Association convened in Concordia Hall, and was called to order by the president, Dr. George J. Englemann, of St. Louis, Mo., at 9:30 A. M.

Mayor Glenn delivered an address of welcome, the response to which was made by Dr. R. B. Manry, of Memphis, Tenn.

Dr. R. B. Maury, of Memphis, then contributed a paper entitled *How Shall We Treat our Cases of Pelvic Inflammation?* The paper gave a comprehensive *resumé* of the pathology of chronic pelvic inflammation as it has been clearly demonstrated by Bernutz, Polk, Coe, and others and by the results of abdominal section. This pathology is that of pelvic peritonitis dependent upon tubal disease, not cellulitis. The author declared the term chronic cellulitis a misnomer, a pathological condition which existed only in the imagination of the physician, a term which had been productive of pernicious results in practice, and which should no longer be used in connection with non-obstetric pelvic inflammation.

When the pathology rests upon such abundant and positive evidence, the question might be asked, why re-open a discussion upon it now? Because it is evident from our society proceedings and hospital reports that great confusion exists in the medical mind to-day in regard to it. Dr. Byrnes' case, discussed in the New York Obstetrical Society during the present year, was taken as an illustration. In speaking of such cases the great tendency to relapses in chronic pelvic inflammation was illustrated by two cases in which pus tubes were found five and seven years after attacks of peritonitis, and when it was supposed the patients were entirely restored to health. Upon the subject of treatment the writer admitted that by non-surgical therapeutic measures large intra-peritoneal exudations are often absorbed, while even some tubal and ovarian inflammations entirely

disappear and recovery seems complete. But this is the exception and by no means the rule. For the radical cure of chronic pelvic inflammation non-surgical treatment fails in a majority of the cases. A great many women suffering to a moderate degree continue to do so in spite of the best directed non-surgical measures, and perhaps wisely elect not to undergo operation.

As a rule, the only radical and permanent relief is afforded by removal of the diseased appendages. The treatment of pus collections of course requires abdominal section.

Dr. Joseph Price, of Philadelphia, followed with a paper on *The Motive and Method of Pelvic Surgery*, in which he said pelvic surgery must be considered apart from abdominal surgery. It is distinct from it, both in the nature of the lesions dealt with, in the difficulties it presents, and in the complications and embarrassments to routine technique.

Nowhere as much as in pelvic surgery does the distinction between the general surgeon and the specialist in pelvic disease stand out so clearly. Pelvic adhesions in appendicitis, for instance, Mr. Treves would deal with by the knife. If this is feasible, why not put the knife to ovarian and tubal abscesses, to all intestinal fixation by inflammatory processes and the like? The very suggestion of such method to the mind of the specialist accustomed to deal with all the complexities of pelvic surgery is fraught with evil, and this mere suggestion only makes it clear that general surgeons, in so far as they are entirely wedded to the knife in removing disease, fall short of the demonstrated harmfulness of its application in pelvic work.

Relative to electricity, Dr. Price said that electricians yet talk learnedly of the undetermined place of electricity in the treatment of ovarian cysts, but tar-water and tractors have gone to their long rest. The time must yet come when the claims made for electricity as an universal panacea must be exploded, and its real, limited, and narrow horizon of usefulness be well defined. The pernicious effect of so-called cures of reported complicated cases, adhesions, inflammations, and the like, by men without training, who look only at the ampere-meter while they adjust a clay pad or introduce a galvanic sound, is not to be over-estimated.

He had repeatedly shown, by exhibited specimens, the fallacy of the claim of exact diagnosis made by these men, and the arguments are irrefutable. He believed that the only position assumed by the electricians that has the slightest foundation in fact is that electricity will sometimes control hemorrhage and relieve pain. That it cures either is not proven.

In dealing with adhesions, the first point to be sought after is to find a crease or crevice, into which some progress can be made. In separating intestinal adhesions, they should be broken as far from the bowel as possible. The farther away, the less liable will they be to bleed, and the absence of hemorrhage is a great comfort in these cases. The strings of adhesions may be dealt with according to their size, it sometimes being best to remove them; at others there is no necessity for this. In doubtful cases their removal is the better surgery. All bowel adhesions should be carefully examined after their separation. By so doing, fecal fistulæ will often be avoided by the careful placing of an intestinal suture. It hence is apparent that no pelvic surgery should be attempted until the operator is competent to deal with intestinal wounds even to resection and anastomosis. Once the adherent mass is removed, the ligature should be applied close up to the cornu uteri. The ligature should not be so heavy as to resist knotting, nor so light as to break easily. The ordinary surgical knot is the safest of all knots with which to tie the pedicle. It constricts more evenly and certainly, and will slip less readily. The leaving of sufficient button is of the greatest importance to prevent slipping of the ligature.

In the treatment of extra-uterine pregnancy his urgent advice is to operate without delay when the symptoms point to the disease, with the assurance that delay will only complicate matters and sacrifice the life of the mother.

The field of pelvic surgery, said Dr. Price, is not one of experiment or palliation; that it strives in all cases to remove the offending body in order to conserve the rest of the economy; that its tenets are founded on philosophy and fact, not fiction, and that its worth lies in its proved results. The surgery that plucks out the eye or casts aside the limb to

save the eye or the limb or the life is greater, better, and wiser than a sentiment that preserves a shell to inclose a ruin.

FIRST DAY—AFTERNOON SESSION.

Dr. W. H. H. Cobb, of Goldsboro, N. C., read a paper on supra-pubic cystotomy in a case of enlarged prostate. The patient, a farmer, married, aged forty-nine years, rheumatic diathesis, dated his troubles back to 1881; while attending to the duties of Register of Deeds, he carelessly allowed overdistention of his bladder, and had suffered more or less since that time. In 1882 he had an attack of nephritic colic, and passed a small calculus, similar in size and shape to a grain of wheat. On three different occasions he passed dark, gritty deposits. In 1883 he suffered much inconvenience and some pain in urinating. In 1887 he passed a dark, gristly, bloody substance about the size of a corn or pea, accompanied by much pain and bloody urine. For the past three years he has suffered much with cystitis in a very aggravated form, with great pain and difficulty in defecation, urine containing much blood, pus, and mucus. The patient's efforts to relieve his bladder and bowels were tormenting, and night after night was spent walking over his premises with groanings so severe as to disturb his neighbors. The patient consulted Dr. Cobb, June 15th last, and from the history of the case he suspected vesical calculus, but failed upon examination with the sound to detect any stone. A digital examination, however, per rectum, disclosed the right lobe of prostate greatly enlarged, rough, indurated, exceedingly tender and sensitive. After consultation by letter with Hunter McGuire, he decided upon supra-pubic cystotomy as the only hope of permanent relief, which was done after the method of Dr. McGuire on June 23d. At the expiration of two months (August 23d) he found the prostate perfectly normal, with no symptoms of cystitis, and withdrew the plug, allowing the fistula to unite, which it did in about ten days. His patient performs the act of urination and defecation without the slightest trouble, and expressed himself as entirely relieved, and is at present following his usual vocation.

Dr. L. S. McMurtry, of Louisville, read a paper on Inflammation in and about the Head of the Colon. He said the teachings to be found in systematic treatises on surgery and practical medicine upon inflammation and its results in and about the *caput coli* are not only worthless, but positively misleading. This is true not only as to pathology and treatment, but even as to the anatomy and relations of the cecum and its appendix.

It is well known that inflammatory changes in the vermiform appendix are in almost every case the origin and seat of the inflammatory diseases about the *caput coli*. Inflammation of the cecum is very rare, yet the testimony of surgeons and pathologists is abundant that in a certain proportion of cases cecitis, with perforation, occurs without involvement of the appendix. Regnier in 1886 operated in a case presenting symptoms of intestinal obstruction with peritonitis, doing an abdominal section. At the autopsy cecitis with perforation was discovered. In 1888 the speaker operated in case of perforative cecitis and sutured two perforations in the cecum. His patient recovered and was present in the surgical section of the American Medical Association in May of that year.

Fecal impaction has been mentioned by surgical writers as a cause of inflammation about the head of the colon. Pain over the cecum, with a fecal mass perceptible on pressure, often occurs, but is rarely, if ever, associated with peritonitis. A few weeks since Dr. McMurtry saw a case in conjunction with Dr. H. H. Grant, of Louisville, in which a localized peritonitis existed in the right iliac fossa, with a well-defined firm tumor. Abdominal section was done, and instead of appendicitis they found the disease to be cancer of the *caput coli*. Irrigation and drainage rescued the patient from the immediate danger begotten by active peritonitis. The patient was a woman of middle age, and the engrafted peritonitis presented the symptoms of an acute condition. Malignant disease of the cecum has not, so far as the writer is aware, been mentioned by writers on this subject as a probable condition in the diagnosis of deep-seated inflammations of the right iliac fossa.

The decision to operate should be determined more by the grade of the inflammation than by the time it has existed. When a diagnosis has been made, and three days have elapsed without subsidence of pulse and temperature, the operation should be done.

Dr. McMurtry submitted the following conclusions:

1. Inflammation about the *caput coli* is, as a rule, inflammation of the appendix.
2. A certain proportion of cases will recover spontaneously by resolution. With these recurrence of the disease is common.
3. In the larger proportion the disease will endanger life, and may at any moment assume a condition practically hopeless.
4. Early operative interference involves less danger than delay, and should be resorted to in all cases in which a high grade of inflammation is persistent.
5. The essentials of the operative technique are brief anesthesia, quick and thorough work, removal of the appendix. The lateral incision is preferable to the median.

FIRST DAY—EVENING SESSION.

President Engelmann delivered an address entitled *The Causes of Ill Health in American Girls, and the importance of Female Hygiene*. He showed that the health of the American girl is threatened and impaired by causes more or less avoidable, as they are due to our methods of life, our methods of training and education; that the physique of this girl, most favorably situated amid auspicious possibilities, is imperfect; her brain overworked, her nerve power exhausted, her function impaired, and reproduction endangered, all by reason of the susceptibility of her peculiar organization, and the increased impressionability of the sensitive system during the years of development, in which it is subjected to the most severe strain.

The remedy is attention to woman's peculiar organization and the cyclical wave of her dominant function; or, in other words, harmonious development and occupation of nerve and muscle; diminished brain work and nerve stimulation, with increased and co-ordinate physical exercise; increased protection and diminished compression of dress; self-knowledge

and individual care during periods of heightened susceptibility. Changes are necessary in custom and fashion, in methods of labor and education. A harmonious co-education of mind and body should be approximated, with coincident maintenance of proper hygienic conditions.

Dr. Engelmann closed with a plea for the self-care of the American girl and her proper physiological instruction by the mother, which alone will mitigate or remove the initial cause of many of her ailments. Upon the mother he would impress that the perfect development of the female function, and the maintenance of this function once developed in a healthy condition, is essential to the perfect development of the girl and the perfect health of the woman; that self-care, a well-regulated female hygiene, is the foundation of her well-being.

SECOND DAY—MORNING SESSION.

Dr. C. A. L. Reed, of Cincinnati, O., read a paper entitled *Indications for Operation in Ectopic Gestation*.

This paper starts with the assumption that the only proper treatment of ectopic gestation is by laparotomy or, more properly, celiotomy. While the profession has become practically unanimous that this is the proper line of treatment, the indications for operation have been less definitely decided upon. This conviction is forced upon the observer, not only by a study of the literature of the subject, but by encountering cases which have been advised against operation by their attending physicians, until hemorrhage within the pelvis has threatened a fatality which is but too frequently realized. The most legitimate excuse for this dilatory practice is to be found in the confusion which has arisen with regard to the supposed uniform causal relationship of ruptured ectopic gestation to pelvic hematocele, and the division of the latter into "primary" and "secondary" rupture. These terms are unfortunate, and, as used in this connection, may be entirely arbitrary. "Primary" rupture is made to mean rupture beneath the peritoneum, instead of "first" rupture, as the etymology of the word would imply, while "secondary" rupture is made to mean rupture within

the peritoneum, instead of "second" rupture; whereas, an intra-peritoneal rupture may be and frequently is a primary rupture, when spoken of with reference to the sequence of events in ectopic gestation. There would be no serious confusion even here if we were not also taught to leave extra-peritoneal hematoceles alone to be taken care of by absorption, and if we did not add that, as these hematoceles are generally caused by ruptured ectopic gestation sacs, we are to relegate these cases also to the expectant plan of treatment. This conclusion is without warrant, and is responsible for hundreds of deaths annually from this one cause.

The treatment of ectopic gestation premises the diagnosis of this condition. This is obviously difficult, and in the majority of instances can not be arrived at at all, or, if at all, only presumptively; but in all these cases conditions can be found in the pelvis which, if not conclusive of extra-uterine pregnancy, yet constitute conclusive indications for exploratory operation. The presumption of ectopic pregnancy can be arrived at before rupture chiefly by a history of previous sterility, by a previous amenorrhea, followed after a few weeks by irregular hemorrhage, by increased tumefaction to either side or back of the uterus, and by the existence of false decidua within the uterus. The latter fact may be safely determined by the judicious use of the Emmet curette forceps. The diagnosis after rupture is essentially the diagnosis of internal hemorrhage. Time wasted either to determine the cause of that hemorrhage, or to find out if it be "primary" or "secondary," is criminal. The thing to do is to cut down and operate. The position has been taken that time should be taken for the patient to rally from the shock. One of my own cases died simply because I waited twelve hours for reaction—a lesson which taught me the fallacy of the old teaching, and which has since saved lives at my hands. The best way to overcome shock from internal hemorrhage is to stimulate the patient by giving ether, stop the drain by ligating the bleeding vessels, and rouse the nervous system by washing out the belly with hot water.

In cases which come under observation after

reaction from primary shock, shall we wait for evidences of so-called secondary rupture? In one of my cases suppuration occurred, and in another the blood clot grew until in the course of some weeks it measured nine pints when I removed it, and still another case emphasized the latter fact. These cases all recovered, but they taught me the fallacy of waiting for absorption.

What shall be done with the appendages on the other side? In view of the fact that tubal pregnancy generally depends upon desquamative salpingitis, as confirmed by the recent observations of Formas before the American Association of Obstetricians and Gynecologists, and in view of the fact that this disease is almost uniformly bilateral, the question is at once raised: Is the woman liable to an ectopic pregnancy on the other side? Herman, in the *British Medical Journal*, September 27, 1890, reports such a case, and Tait reports another with death from rupture of the second conception. Leopold Meyer reports another, and refers to verified cases by Veit and Olshausen. There are now at least ten cases on record. From this I conclude that, if the patient's condition at the time of operation is such as to justify further interference, the appendages from both sides should be removed.

In the presence of rupture, the indications for operation are so imperative that no time should be lost in unnecessary preparation. In this connection, a recently reported case by Manly, of New York, offers points for the severest criticism. In that case a night was waited for reaction, which was not realized, and a part of the day was squandered in washing the wall-paper to meet Listerian indications while the woman was bleeding into her abdominal cavity; and although by dint of marvelous vitality she recovered, the lesson is none the less impressive than the delay was culpable.

The question of viability of the child has some bearing upon the line of treatment to be adopted. If the case has passed beyond the sixth month, let it proceed to term, but only under the strictest possible surveillance and with preparations at hand to operate at any moment. The statement by Manly that "ectopic or extra-uterine pregnancy is not at-

tended with great peril to the mother's life" [*Internat. Journal of Surgery*, October, 1890] could be accounted absurd, if its influence were not murderous.

The conclusion to be arrived at from the most careful study of the subject is that so clearly expressed by Tait, viz: "If I ever should make a diagnosis of tubal pregnancy before rupture, I should advise its immediate removal by abdominal section as being more certain and far more safe than the fancy methods of puncturing the cyst and injecting poisonous fluids, or passing through it some kind of galvanic current."

Dr. Bedford Brown, of Alexandria, Va., followed with a paper entitled *The Local and General Treatment of Gangrenous Wounds and Diseases*. Many years ago, previous to the late war, Dr. Brown determined to institute a series of experiments to ascertain the capability of local and general treatment of all gangrenous wounds and diseases that came under his care either for their prevention or arrest. The object was to find local agents possessing active properties as stimulants of vital action in the affected parts, also as means of disinfecting and deodorizing gangrenous sloughs, hastening their final separation, and for the establishment of a healthy basis for granulation. In cases coming under his care he found that the old deodorizer failed to accomplish these objects. He then employed a solution (almost saturated) of sulphate of zinc and dilute sulphuric acid as a local application, which seemed to meet all the requirements. The first case in which it was applied was according to the following formula:

R	Zinci sulphatis.....	℥ j;
	Aque.....	O j;
	Acidi sulph. dil.	℥ ss. M.

After the free application of hot water at 110° the solution was applied every three hours on bats of raw cotton. In the course of two days the sloughs separated rapidly, leaving a perfectly clean, healthy basis for granulation. This solution evidently possesses active antiseptic properties. It is an admirable deodorizer; it is clean and cleanses the parts effectually. In cases of great loss of sensation in the parts, weak circulation, reduction of vital ac-

tion, and depressed vitality, he knows of no agents better calculated to arouse nervous action and stagnant circulation, for as soon as the living basement is exposed it gives rise to intolerable pain. He has used this solution in all forms of gangrenous wounds and diseases, some limited, others extensive and associated with septicemia, with benefit.

Dr. Brown cited the history of several cases of different varieties of gangrenous wounds and diseases treated by various methods.

Dr. Henry F. Campbell, of Augusta, Ga., made some impromptu remarks on Vesico-vaginal Fistulæ.

Dr. W. L. Robinson, of Danville, Va., read a paper on The Treatment of General Septic Peritonitis, in which he called attention to those cases which tended, by absence of pain and a seemingly improved condition after chill and fever, to mislead as to the necessity of operating, and instanced two cases of recent date seen in consultation in which septic peritonitis and secondary abscess existed in spite of the seemingly favorable condition of the patient. He says that often there is an utter disproportion between the pathological condition and the amount of pain and tenderness—a condition so often seen in puerperal peritonitis.

He states that traumatic abdominal injuries, appendicitis, and pelvic inflammations are the chief causes of septic peritonitis, while, of course, any internal or external influence which produces suppuration may be the indirect cause.

He agrees with Dr. G. Frank Lydston, of Chicago, that in children, falls, blows, etc. are the causes generally of peritonitis, and that because of the age of children not directing attention to the seat of injury we often diagnose the disease too late. Dr. Robinson takes the stand that gonorrhea is a frequent cause of septic peritonitis, and the reason why it did not always produce it was, that it did not invariably invade the uterus, and even when it entered the tubes the adhesions to the ovary rendered it self-limiting.

He holds that section, irrigation, and drainage is the treatment, and that where adhesions are extensive that salines should follow the operation in order that the peristaltic action of the

bowel would prevent re-formation. Cases occur which, when seen by the surgeon, are too prostrated to undergo a complete operation, and the proper plan is to rapidly do what one can by section, irrigation, and drainage. Dr. Robinson instanced a case of recent date in which the patient was saved when seen only *in extremis*. He urges the surgeon to go prepared to resect, anastomose, etc., as complications may indicate; where conditions are diagnosed which will most likely terminate in septic peritonitis, such as recurring appendicitis, that preventive measures should be undertaken; and where great tympanites exists he would adopt Dr. Davis' mode of opening the bowel and flushing it out with hot water.

Dr. John D. S. Davis, of Birmingham, Ala., contributed a paper entitled The Clinical History of the Epi-cystic Surgical Fistula, with Cases.

SECOND DAY—AFTERNOON SESSION.

Dr. W. O. Roberts, of Louisville, read a paper on Removal of Stone from Female Bladder through the Urethra, with Cases. (See page 321.)

Dr. William Perrin Nicolson, of Atlanta, Ga., presented a paper entitled Wet Antiseptic Dressings in Injuries of the Hand. After dwelling upon the importance of the subject, both from the standpoint of the future earning capacity of the patient, and the large amount of financial compensation demanded from corporations, he stated that for seven or eight years past he had looked after the surgery of several railroads and manufacturing establishments, and in that time had been called upon to treat more than three hundred hand injuries, representing all grades of injury from slight contusion to complete destruction of the larger part of the hand. The especial point that was urged in the paper was the doctrine formulated by Verneuil, never to use a scalpel in a hand injury. The old teaching, that when a finger was crushed you should go far enough behind the injury to secure a sound flap and amputate, was pernicious in the extreme, and had cost thousands of fingers that would have been restored to usefulness. Only such parts as were actually destroyed and pulpified should be re-

moved, and all the tissues to come away could be amputated with the scissors. Projecting pieces of bone could be removed with pliers until reduced to the level of the fleshy parts. In compound fractures the parts should be coaptated as well as possible, and the line of separation be determined by nature and under strict antiseptic dressings. Such a slough was harmless. Another point to which attention was forcibly called was the utilization of blood-clot in filling up ragged injuries, and by its substitution the restoration of lost parts. When a finger was crushed off, the end should be trimmed with scissors, and the clot utilized in building up a tissue over the bone. In reference to dressings, Dr. Nicolson said that he had tried almost all varieties, and had finally obtained the most satisfactory results from keeping the parts constantly bathed in a non-poisonous antiseptic solution.

In dealing with these wounds they were first cleansed as well as possible, and then bathed in a sublimate solution. Over all wounds a piece of aseptic rubber tissue or oiled silk was placed, then iodoform and sublimate gauze, and finally over all a covering of rubber tissue, into which, at some convenient point, a small opening was made. The patient was then given a bottle of antiseptic solution, to be carried in his pocket if moving about, and instructed to pour, at frequent intervals, enough into this opening to saturate the dressings. He uses almost exclusively listerine, combined with a small amount of carbolic acid, in the proportion of half an ounce of the former and half a dram of the latter in a six-ounce mixture. If there was much pain, a small amount of aqueous extract of opium was added. These dressings were not disturbed until the third day, when they were removed under strict antiseptis, to preserve the integrity of the blood clot. Wet dressings were substituted at the end of about a week by the ordinary antiseptic dressings, kept moist by external covering of rubber tissue. Should sloughing occur, it is kept wet for a longer time with the antiseptic. Under this treatment pain was reduced to the minimum. Suppuration never occurred, and the separation of sloughs was facilitated by the warm moisture.

Dr. J. T. Wilson, of Sherman, Tex., read a paper on Uterine Moles and their Treatment. In the few cases that had come under his observation they had been more troublesome and elicited more anxiety than most writers indicate they should, and the hemorrhage in some of the cases was alarming; then too there were some points noticed in his cases which he had failed to find described in text-books.

All authorities seem agreed upon the etiological and pathological view generally taken of it, that it is a blighted or altered conception; the ovum having perished, its covering, or the placenta, if formed when this change takes place, becomes attached to and continues to receive nourishment through the uterine walls, and remain or become an organized product until it is thrown off; and this condition is attributed by some to the vitality retained in the villi of the chorion.

He had never met with a case that was lying loose in the uterus, but all were more or less adherent to its walls and most of them to the posterior wall. They had to be taken away piecemeal, and the surface well curetted, washed out, and carbolic acid or Churchill's iodine applied to the surface. The patients all required after-treatment, because all, except one case of hydatiform mole, had endometritis and endocervicitis, two had severe cervical lacerations and erosions; most of them had a greater flow than usual at the subsequent menstrual periods until the inflammatory condition was relieved; in two cases the general health, while not robust, was fairly good, the others more or less delicate, none of them being in perfect health; none had any history of a cancerous cachexia, nor of syphilitic taint; one was tuberculous. His experience had taught him to believe that if these cases do not receive treatment at a proper time there are two grave dangers to be apprehended, viz., hemorrhage, which, if not an immediate cause of death, is capable of leading indirectly to that end and sepsis.

In the treatment, if the cervix is sufficiently dilated and hemorrhage troublesome, the mass should be promptly removed. If this can not be done, a hot antiseptic vaginal douche should be given, followed by a careful and efficient tampon, with the internal administration of

ergot and anodynes, if required, directing quiet, rest, and simple diet. In from twelve to sixteen hours the tampon should be removed and the foreign body extracted as completely as practicable; this will require a good, stout pair of forceps. He had used the ordinary dressing forceps and placental forceps for the purpose. An excellent instrument in some cases is Emmett's curette forceps. The surface should be well curetted with a wire curette, the uterus thoroughly washed out with a hot solution of bichloride of mercury and Squibb's carbolic acid or Churchill's tincture of iodine well applied to the surface. If much bleeding ensues—and this is not usual—the application of persulphate or perchloride of iron gives good results. The patient is put to bed and kept there as long as the indication in each special case may require; she is put upon a tonic treatment and hot vaginal antiseptic washes. In from three to five days the uterus may need curetting again and another intra-uterine douche; then the application of iodine about twice a week, alternated occasionally perhaps with carbolic acid as long as may seem necessary, and the cure, if possible, completed of any uterine disease that may exist. The patient's general health is carefully looked after and her mind tranquilized.

THIRD DAY—MORNING SESSION.

Dr. G. Frank Lydston, of Chicago, read an elaborate paper entitled *A Review of the Treatment of Varicocele, with Cases*. He said, in discussing the various merits of operative procedure, it was unnecessary to take them up in detail. The *raison d'être* of many specially devised and named operations is apparent only to the operator. For practical purposes the various methods may be divided into (1) acupressure; (2) subcutaneous deligation; (3) open deligation; (4) deligation with resection of veins; (5) deligation with resection of scrotum; (6) resection of the scrotum.

The employment of acupressure, to Dr. Lydston's mind, was an evidence of a lack of faith in modern antisepsis. It reminded him of the Dutchman's method of cutting off his dog's tail an inch at a time, so that it would not hurt him so much. Gradual obliterations of

veins have all the dangers of immediate deligation in a marked degree and had none of its advantages. The term acupressure covered practically all methods of gradual obliteration of the veins, of which Davat's operation is an illustration. Subcutaneous deligation is not essentially dangerous in skillful hands. Simple as the operation appears, however, accidents have occurred. The operation is done in the dark, and more tissue is included in the ligature than is necessary. Strangulation of tissue is not conducive of safety. Scrotal hematocele, phlebitis, septic infection, thrombosis, and embolism are possible. The vas-deferens has been included in the ligature. He does not condemn the subcutaneous operation in suitable cases and in skillful hands, but he believes there are better and safer methods on the average. There is little choice between deligation without disturbance of the veins and deligation with resection of the veins, excepting the remotely greater danger of sepsis in the latter. Gould's method of division by cautery he believes to be the most dangerous operation yet devised. The dangers of the open method are in a less degree than those of the subcutaneous deligation. If open deligation be determined upon, the operation should be done as high up as possible in the straight portion of the veins and a single ligature applied to the vein. Deligation with resection of the scrotum he considers to be the ideal operation in the majority of cases requiring surgical interference. His plan is as follows: An incision is made parallel with the spermatic cord just below the external ring. This incision should be about one inch in length. The cord is hooked out with an aneurism needle, the vein separated and tied, the ligature is cut through and the cord dropped. Sutures and antiseptic dressings complete the operation. The scrotum is now amputated by the improved Henry operation. Dr. Lydston uses decalcified bone drainage-tube and juniperized silk ligatures and sutures. Resection of the scrotum he considers the simplest and safest operation for varicoceles of moderate size. In the more marked forms the affection invariably recurs to a greater or less extent. He does not, therefore, consider the so-called Henry operation a radical cure in the

true sense of the word. The author reported a large number of cases operated upon by various methods with results, and, as far as could be learned, the subsequent history of the patient. The author had noticed hydrocele as a result of subcutaneous deligation in two cases, one operated upon by himself and the other by another surgeon. The doctor reported one very interesting case in which the scrotum was continually bathed in bloody perspiration and in which the seminal ejaculations were heavily tinged with blood.

Dr. Willis F. Westmoreland, of Atlanta, followed with some impromptu remarks on Morbid Reflex Neuroses.

Dr. George A. Baxter, of Chattanooga, read a paper on Silicate of Soda, Some New Methods of Use in Surgery, in which he said the jacket of baked silicate of soda which he would present to the Association possessed all the qualities to be found in the plaster, firmness and support, and weighs actually one pound and six ounces. It is neater in appearance and finish; can be perforated like leather for ventilation, which plaster can not. It is even lighter than leather, without its costly process of construction, and has the same advantage over the woven wire jacket, with the additional advantage over both these latter, and all others of this class, that it can be constructed by any surgeon at any time or in any place. Dr. Baxter suspends his patient and puts roughly a plaster jacket around him, and cuts this as soon as it has hardened enough to retain its shape, thereby lessening materially the time of suspension, the most trying ordeal with this or the plaster, and not without its dangers when long continued. Bind the cut edges together where it has been cut down directly in front with cords, and then place a core of paper in the center. This paper core is used for two reasons: (1) to lighten the cast and take as little plaster as possible, and (2) to dry it the more readily by heating the inside. This done, the plaster is poured around the core and inside the cast, which gives him a mold of the body in extension and counter-extension exact in every respect. Around this is made the silicate jacket after the manner of the plaster roller bandage, weaving one-half-inch metal strips in

the meshes of the bandage at a distance of four inches apart around the whole cast, an inside lining of a knit shirt having been first placed over the cast. The whole is then placed over a coal-oil stove and allowed to dry out, which it does in from one half to two hours or less, especially if the cast has been previously dried. This process of heating not only dries the silicate, but bakes it as well, and renders it impervious to the action of water or the perspiration, and gives it sufficient strength to allow of its being perforated for ventilation. It is now cut from the mold with a straight incision down the center, two pieces of leather, to which button hooks or eyelets have been previously attached, sewed up and down the front on each side, then the whole can be laced up solid or loosened and taken off at will. The necessity of taking off a jacket or leaving it on during the whole course of treatment will of course depend upon the character of the disease or the injury under treatment.

Dr. Edwin Ricketts, of Cincinnati, Ohio, contributed a paper entitled Surgery of the Gall-bladder, in which he said to Langenbeek was due the credit of totally extirpating the gall-bladder, and to J. Marion Sims we owed a debt of gratitude for establishing the operation of cholecystotomy.

Dr. Ricketts reported seven cases of gall-stones.

CASE 1. Mrs. X, aged thirty-eight, married, consulted him in 1880 for a tumor in her right side in the region of the gall-bladder. Said she had passed by the bowel, following a severe attack of hepatic colic, a number of gall-stones. She was emaciated and suffered from what she claimed was neuralgia of the stomach. She was slightly jaundiced and bowels constipated. Upon examination of the abdomen the tumor was well marked and nodulated, above which was the liver surface smooth. He made the diagnosis of gall-stone, and urged an operation. The patient's physician, however, urged the expectant plan of treatment, which was accepted by the patient. She then went to the country, and in less than three months had an attack of hepatic colic, followed by peritonitis, dying inside of three days.

CASE 3. Ellen Z, colored, aged thirty, con-

sulted him for a markedly distended gall bladder which made its appearance after a hard day's work over the wash-tub. She had been sick for ten days with fever, temperature reaching 103° , rapid pulse, clayish stools, with occasional attacks of hepatic colic, though not severe. He opened the gall-bladder, turning out one pint of fluid, which consisted of bile, mucus, and pus, stitching the gall-bladder up against the peritoneum. After three days catarrhal plugs were washed out of the common duct through the abdominal incision, in which had been deposited a glass drainage-tube. The fistulous tract is still open, discharging periodically, but with no bad results to the patient.

In Case 4 a diagnosis of cancer of the liver was made by the attending physician. The gall-bladder was opened, and the stone turned out weighed 128 grains; the common duct was found filled with catarrhal deposits.

CASE 5. After incising the gall-bladder there escaped first about one dram of pus, after which Dr. Ricketts turned out 23 stones. A diagnosis of cancer of the liver in this case was made by the attending physicians.

Dr. Hunter P. Cooper, of Atlanta, Ga., reported a case of Fracture of the Femur due to Fragility.

Dr. George H. Noble, of Atlanta, followed with an illustrative paper on *Procidentia Uteri*.

THIRD DAY—AFTERNOON SESSION.

Dr. W. Hampton Caldwell, of Lexington, Ky., read a paper on Rectal Medication, in which he said that several years ago he was convinced of the utility and safety of rectal administration of medicine, and had ever since regarded it as a most important plan of treatment. Since we accept the theory of the local origin or manifestation of the majority of diseases, this idea of rectal administration of medicines was more readily accepted as scientific in its applications than at any time heretofore. The rectal suppository consisting of coco butter, incorporated with the various therapeutical agents, affords the most efficient and pleasant mode of administration in our possession. Rectal suppositories satisfy all requirements as a local or constitutional remedy.

They are neat, convenient, and in almost every instance preferred by the patient to the administration of the same drug by the mouth. In the administration of the anodynes it is certainly a superior method of administration over all others, as the sensitive stomach is no longer a barrier or excuse in the administration of even the most disagreeable medical agent; for we well know in many instances that this organ is either intolerant to opiates or the patient has an invincible objection to taking them. The impossibility of the rectal dose being thrown up is one great advantage over all other methods of administration. The effects of rectal medication embrace a wide range of actions, including anodyne, antiseptic, alterant, and astringent. In severe pain they certainly afford the best and safest source by which our patient's suffering can be relieved, as the action upon the rectal surface of a diffusible anodyne is quite rapid and produces an effect about as soon as when administered by the stomach. In all inflammatory or painful affections of the abdominal or pelvic organs this plan of administration has succeeded better than all others with the author.

Dr. Thad. A. Reamy, of Cincinnati, Ohio, reported a case in which he removed a stone weighing 365 grains, by vaginal cystotomy, from the bladder of a child six years of age, with injury of the ureter. Operations done for closing the bladder were difficult, but ultimately successful. He exhibited the stone and made some comments on the case.

He felt, after the stone was removed, that it would have been better to have made suprapubic cystotomy. Had he known the size of the stone he would have probably done that operation. But in view of the fact that it was partly encysted, that the bladder walls were much inflamed and thickened, also the fact that in the child the parietal peritoneum dips much lower down in front of the bladder than in the adult, it became a serious question whether this course would have been better than the one pursued.

It was not clear whether the ureter was damaged in the removal of the stone, or was exposed by the sloughing which occurred much later on. He was inclined to favor the former

view, and that the discharge of urine into the tissues of the bladder wall, in the line of suture, was to no small degree responsible for some of the failures in closing the bladder. However, until the last operation the most critical examination failed to discover the ureter.

Though Parvin, Campbell, and others have turned an exposed ureter into the vagina, the speaker was not aware that it had heretofore been done in a subject so young. The vagina being so small rendered the manipulation difficult in the extreme.

Dr. James A. Goggana, of Alexandria City, Ala., read a paper on The Surgical Treatment of Empyema. He said that during the last eighteen months he had treated six cases of empyema which developed in the wake of pneumonia, all of which have made perfect recoveries. These patients varied in age from three to thirty-five years.

Surgical treatment was the one which had been the most successfully employed. Spontaneous cures, he said, were rare, so rare that surgical interference was the rule. There were many methods of operating for the removal of pus from the pleural cavity, but they may be classified under two general headings: (1) the closed method, which consists in removing the pus by simple puncture with some kind of trocar or modern aspirator, and allowing the puncture to heal at once; (2) the open method, which consists in making an incision more or less free with the introduction of some kind of drainage-tubes to maintain the perfect evacuation of the fluid and admit of medicated washings, and to promote free ingress and egress of air that has been passed through an antiseptic dressing. The surgical treatment then being an absolute necessity, we can not overestimate the importance of making the diagnosis certain by resorting to exploratory puncture with a hypodermic syringe. We can assure the patient and friends that no evil results can come from this procedure, and that the prognosis positively depends upon this means of settling the diagnosis.

Officers for 1891: President, Dr. L. S. McMurtry, Louisville, Ky.; First Vice-President, Dr. McF. Gaston, Atlanta, Ga.; Second Vice-President, Dr. J. T. Wilson, Sherman,

Tex.; Secretary, Dr. W. E. B. Davis, Birmingham, Ala.; Treasurer, Dr. Hardin P. Cochrane, Birmingham, Ala.

Place of meeting, Richmond, Va., second Tuesday in November, 1891.

RICHMOND (VA.) ACADEMY OF MEDICINE AND SURGERY.

Stated Meeting October 27, 1890. Dr. W. W. Parker, President, in the chair.

Dr. Wm. B. Gray read a paper upon Indigestion, a Cause of Bright's Disease. He said that he need not remind us that it is claimed by those whose business it has been and is to investigate the subject, that to enter the circulation substances must become peptones as a prerequisite to absorption. With this proposition, delicate as is the great subject, and gravely as he regards the issues of the material question, in the light of investigation and of experience as well, he must modestly venture to take issue.

In the outset it is pertinent and proper to glance at normal digestion so far as proteids are concerned, they being the ones with which we particularly have to deal in the consideration of our subject.

Saliva exercises no action on proteids or fats. The stomach chymifies, and its product is of acid reaction. This acidity is subsequently neutralized by the alkali of the intestinal mucous membrane and the pancreatic juice. Pepsin and the dilute hydrochloric acid transform proteids into a soluble form, to which Lehman gave the name of peptones. These peptones are probably retransformed into serum-albumen before being absorbed and entering the circulation.

The pancreatic juice, though much more energetic, acts very much as the saliva ferment. Its ultimate action is to convert proteids into true peptones, or tryptones.

The bile, acting vigorously upon the now alkalized pabulum or food, converts the same into chyle. By this time in the process of digestion it is ready for absorption, becomes assimilable or convertible into tissue.

The large intestine is an absorptive rather than a secretory canal. At the beginning of the colon its contents are thin and watery, becoming more solid in their further course.

Klug and Koreck regard Lieberkugn's glands as absorbing structures. In the dog the secretion of the large intestine has no digestive properties. Toxic substances are more rapidly absorbed here than from the stomach. Unchanged fluid egg-albumen, milk, and the proteids, flesh juice, etc., all have been absorbed. This proves that a non-assimilable albumen, not a peptone, may find an entrance into the circulation.

By way of parenthesis here, the speaker quoted T. W. Fraser as saying that all infused beverages, such as tea, coffee, cocoa, etc., retard the peptic digestion of proteids, while brandy, whisky, and gin, in moderate quantity, promote digestion by exciting the secretory glands; wines are inimical, especially to salivary digestion, because of their acidity. By reason of the tannin it contains, tea is more objectionable than either coffee or cocoa.

The whole intestinal tract, from the cardiac orifice of the stomach to the anus, being lined by columnar epithelium, is capable of performing the function or act of absorption. Though the mouth and esophagus are lined by squamous epithelium they are adequate to effect absorption, as may be proved by placing cyanide of potassium on the tongue and getting its prompt toxic effect. In the intestinal tract the direct channel of absorption is the capillaries, and the indirect the lacteals of the mucous membranes; the former avenues convey to the rootlets of the portal vein, while the latter pass into the lymphatics, thence into the thoracic duct and entering the circulation where that duct empties into the sub-clavian vein. The absorption of digested foods occurs by endosmosis, diffusion, or filtration. Endosmosis takes place in the intestinal tract through the mucous membrane and the blood and lymph capillaries. Filtration occurs through the pores of a membrane by pressure. Diffusion needs no explanation. If digested matters enter the circulation by one of these processes, why may not the undigested as well? Let us see if they do not.

It has been conclusively demonstrated by Brucke that unchanged proteids can be absorbed, and absorbed even from the large intestine. Czerny and Latochenberger add their testimony in attestation. Alcohol, tartaric, cit-

ric, malic, and lactic acids introduced into the intestinal canal are found in the urine in their respective normal conditions. Metallic salts appear to be held in solution by proteids, and are probably absorbed along with them. Sulphate iron, cyanide potash, and hydrochloric acid have been found in chyle, each retaining its own unchanged identity. Nitrate silver, after traversing the long line from the mouth, *per vias naturales*, declares its own integrity under the skin, and normally responds to light. None of these are peptones, still they have entered the circulation and in an unchanged chemical condition.

We think the evidence we have adduced is abundant to prove the absorbability of other matters than peptones, and their ready entrance into the circulation. Now, do albumens in a non-assimilable shape produce Bright's disease? Being non-convertible into tissue, they are foreign bodies and must be eliminated by the kidneys. Claude Bernard first demonstrated that egg-albumen introduced into the blood is excreted by the kidneys. Lehman and Stokris have also proved the same fact by experimental investigation. It is further established that serum-albumen also escapes along with the excretion of egg-albumen. Even when introduced by way of the stomach, egg-albumen excites albuminuria. Christison has pointed out the same truths as to proteid foods. Even in the dog the subcutaneous introduction of egg-albumen will, in a short time, produce Bright's disease. It is further conclusively established that the excretion by the kidneys of either egg or serum-albumen will, and does, produce nephritis—albuminuria—Bright's disease.

Brunton gives an account of a patient whose urine always contained albumen after eating animal food in the morning. He ascribed it to the imperfect digestion of proteid substances by the pancreas. The same imperfect digestion of these foods is further abundantly and repeatedly exemplified by Drs. Pavy, C. Bernard, Gubler, and others, pure albumen being found in the urine.

And now to sum up:

1. We have attempted to show the normal digestion and disposition of proteids, and their

entrance into the circulation in a convertible form into tissue.

2. We have adduced indisputable evidence of the capability of the entire tract for ingestion to induct into the circulation other matters than proteid substances or peptones.

3. That such non-assimilables do enter and are carried into the blood by an easy and ready transit.

4. That being non-assimilable, so far as proteids are concerned, they are necessarily foreign bodies and must be eliminated by the kidneys in particular.

5. That albumen will not be tolerated by the kidneys without exciting nephritis, abuminuria, Bright's disease.

Mr. Hugh Blair is not prepared to accept the conclusions as deduced by Dr. Gray in the foregoing paper. He thinks albumen in the urine a result, not the cause, of Bright's disease. He admits the physiological fact that water, salts, and fats are absorbed into the circulation without chemical change. Indeed, Flint says nearly all soluble substances, whatever be the density of their solutions, may be taken up by the various absorbing surfaces during life. But the speaker doubts the passage of albuminoids into the circulation until changed into peptones. Egg-albumen when injected directly into the blood finds its way, unchanged, to the kidney for elimination, where it acts as an irritant. But he does not believe it will be so absorbed when put into the alimentary canal. His observation leads him to believe that the best treatment for Bright's disease is a strictly milk diet, and he is not therefore prepared to believe that it will also cause it.

Dr. Gray being called away at this point in the proceedings, through courtesy to him the further discussion of his paper was postponed till the next meeting.

Dr. M. D. Hodge, jr., next made his deferred report on the Water Supply to our Dwellings.

The attention of the doctor had been called to the importance of this subject by finding that the system of water supply in the recently constructed houses of some of his friends was extremely defective.

He then proceeded to explain the defects of each of the appliances most commonly in use,

illustrating their mechanism by diagrams on the blackboard. He showed how many of the apparently perfect arrangements proved to be criminally defective on closer inspection, and all of the mechanical closets were condemned. Of the automatic closets the short hopper was preferable to the long on account of its accessibility in case of chokeage or leakage. In summing up it was decided that the best closet is the short hopper with rim washout, having an S-shaped exit for sealing, with reservoir above furnishing a free rush of water sufficient to flush out the feces, etc., and with a tube extending from the highest point of the seal to the ventilating pipe.

Col. Cutshaw, the City Engineer, who was present by invitation to participate in this discussion, said that there was great need of appropriate legislation looking to the correction of the many evils of the present system of water supply to houses. There should be an inspector of buildings appointed, whose duty it shall be to enforce sanitary rules in the construction of houses. The necessity for legislation to this effect should be impressed on the City Council by concurrent action on the part of the Board of Health and of the Academy of Medicine and Surgery. What we need is some system which shall effectually prevent the accumulation and access to the people of fecal and sewer gases, and which will insure their rapid transmission away from the city.

First of importance in this connection is a perfect closet arrangement for the houses. The typical water closet was invented by Jennings after the Prince of Wales had an attack of fever. This is still the model closet, though it has been subsequently modified and improved. The ordinary water seal in goose neck or S is defective, because when the bowl is flushed out it acts as a siphon, permitting the water to be drawn out of the goose neck, and leaving an unobstructed channel for the return of the gases. This objection is obviated, as has been shown by Dr. Hoge, by introducing a tube from the highest point of the goose neck curve to the ventilating tube. Then have a double water seal—a top and an under seal. When both the bowl and under seal are kept full of water it will resist ordinary gas pressure and prevent its return to

contaminate the premises. Any little gas which may force by the under seal will be absorbed and neutralized by the water in the bowl. This makes the typical water closet. The ventilating tube is essential at every goose neck. The closet, bath-tub, sink, all require it. After seeing that this sealing does take place, and that the gases do not return, the next thing is to conduct these materials to the sea, which brings us to the consideration of sewerage.

The main sewer of Richmond is Shockoe Creek, which should have a paved bottom from its mouth as far up as the sewers empty into it. This main sewer should be so constructed as to insure its contents being carried well out by the tide. The mistake in the main sewer of London was that the outfall was not sufficiently far down the Thames, and its contents returned to contaminate the water and atmosphere of the city.

The speaker next called attention to the necessity for the better ventilation of buildings, emphasizing this by stating that for the adequate ventilation of the hall of this academy an opening of seven and a half feet square would be required to permit the ingress of sufficient fresh air to supply the needs of the members present, and that there should be a corresponding exit. In assembly-rooms, school-houses, etc., requiring the supply of an unusually large amount of fresh air, in cold weather the ingress air would have to be heated, which can best be effected by passing it through coils of steam pipe beneath the ventilators. The egress air is supposed to pass out through the stacks, and this does take place in winter, the difference in temperature being sufficient to insure a draft. But in summer the stack of ordinary height requires some mechanical arrangement, such as a fan, to insure effective ventilation.

Diphtheria or Follicular Tonsillitis? Dr. C. L. Cudlipp is puzzled to know if one of his patients has diphtheria or follicular tonsillitis; has the constitutional symptoms of diphtheria, but he hardly thinks the secretion on the tonsils has the consistency of a membrane.

Dr. J. S. Wellford thinks the secretions from follicular tonsillitis involve a number of points corresponding to the follicles, while the diphtheritic membrane originates in one point, subsequently extending.

In response to an inquiry from Dr. Landon B. Edwards as to the prevalence of diphtheria in the city, Drs. Cudlipp, Hunt, H. M. Taylor, Parker, and others reported cases recently occurring in their practice, and some now undergoing treatment.

Dr. Edwards then remarked that this disease is now recognized as being primarily of local origin, due to the attachment on some exposed surface of bacteria coming from without. These bacteria are destroyed by bichloride of mercury and other germicides. He advised the use of bichloride or some other spray (such as Blair's chloral thymol) where there has been or is likely to be exposure to diphtheria. Authorities assert that bichloride of mercury is as certain a germicide for the prevention of diphtheria as is quinine a remedy for malaria.

Dr. J. S. Wellford is not surprised to hear of diphtheria in the city. He expects some cases of it every winter. Quotes J. Lewis Smith as asserting every case of pseudo-membranous croup to be diphtheritic. Any injury to the throat increases the liability to contract this disease. The doctor maintains that no child reaches adult life in a large city without having had diphtheria, which, to his mind, accounts for the infrequency of diphtheria in adult residents of cities. Quotes Trousseau as saying that it can be only once contracted, and the speaker agrees with him, as otherwise every physician would eventually die from diphtheria, being subject to contract the disease every time they come in contact with a case. Thinks it a purely acute, contagious, specific disease. Does not believe in bacteria as a cause, but looks upon them as scavengers. Diphtheria is due to a contagium not exactly like scarlet fever or measles, but follows the general law of all contagious diseases in that its previous existence destroys the pabulum, precluding the possibility of a recurrence. Has never seen a well-marked case of diphtheria occurring a second time. The only prevention is isolation, cleanliness, and avoidance of any contact with the fomites. Diphtheria leaves the throat in a delicate condition, with increased liability to tonsillitis, etc.

Dr. Wellford's expressions of disbelief in the theory that germs constitute the etiological ele-

ment in diphtheria and allied affections called forth an animated discussion, but the limits of this paper excludes further report of the proceedings.

JAMES N. ELLIS, M.D.,
Reporter.

Reviews and Bibliography.

A System of Obstetrics by American Authors.
Edited by BARTON COOK HIRST, M.D. Vol. II.
Illustrated with two hundred and twenty-one engravings on wood. 854 pp. Philadelphia: Lea Brothers & Co. 1889.

This volume completes the *System of Obstetrics by American Authors*, and its excellent character fully justifies the undertaking. With such collaborators as Dr. James C. Cameron, of Montreal; Edward P. Davis, G. E. De Schweinitz, Robert P. Harris, James Hendrie Lloyd, and Theophilus Parvin, of Philadelphia; Harold C. Ernest, of Boston; Henry J. Garrigues, J. Lewis Smith, and Stephen Smith, of New York, assurance was had from the beginning of the production of a work that would be a cause of pride to the profession of America.

In the first article by Prof. Parvin on the Diseases and Accidents of Labor are two subjects of notable interest, one placenta previa for its importance, and the other hematomata about the neck of the child, especially in the sterno-cleido mastoid, from having been so little spoken of. Prof. Parvin shows that nearly a century ago Denman taught the treatment of placenta previa by podalic version and bringing down a leg to act as a tampon, after having separated the placenta or perforated it with the fingers. Prof. P. believes it should be separated at the edges, when possible, in the interest of the child. The profession in different countries seems not at all agreed as to the best method of treatment. Many eminent French obstetricians employ the tampon, using mostly aseptic cotton balls, while others prefer the colpeurynter.

Dr. Davis treats exhaustively of the forceps, and, like Playfair, he thinks they might with propriety be used with comparative frequency, provided the operator has the requisite knowl-

edge and skill. In comparing the merits of craniotomy and the cesarean section, he believes that the increasing success in performing cesarean section entitles it to increasing consideration.

Dr. Cameron follows with two very interesting chapters on the premature induction of labor and version.

The admirable chapter on puerperal infection is by Dr. Garrigues, whose strenuous advocacy of the antiseptic method is known to the profession everywhere. It is more than doubtful whether the half measures of anti-septics, so often seen among would-be followers of the practice, do not cause the loss of more lives than they save. This of course refers to treatment, not to prophylaxis. The attempts to throw sublimate solutions into the uterus seems a very effective way in many hands to hasten ill results, partly, no doubt, by disturbing granulations and partly by the irritations produced by the caustic, which are then permitted by half measures to become a nidus for septic germs.

A rather queer statement is made by Dr. Garrigues in regard to removal of the after-birth. He says "not even a finger ought to be introduced into the vagina in normal cases," and yet on the next page he declares he has never had any trouble from the introduction of the hand into the uterus. Surely, if the latter is so safe, the former procedure can not, with precautions easily taken, be so dreadful.

On the whole, it is more than probable that, in the present state of the public mind in relation to the physician, asepsis, perfect cleanliness, as inculcated by Tait, is the best procedure in private practice.

Space will permit us to refer to but one more item, namely, the treatment of mastitis in another article by Dr. Garrigues. Dr. G. condemns the practice of kneading or massage of the breasts, and recommends the bandage exclusively, and, it may also be said, exclusively a simple form of bandage devised by himself. Now neither the treatment by the bandage nor that by kneading is new; and unless the bandage of Dr. G. is sufficiently better than others to change the record, the honors are about even. In principle the treatment by the two methods is identical. They both have for their

object the prevention of the collection of red blood cells in the vessels of the breast and their extravasation where they have to be devoured by the white cells preparatory to removal, since this overfeeding gorges the white cells and permits them to fall an easy prey to pyogenic microbes, as the overstuffed fox in the story was caught in the farmer's barn. But it can not be doubted that, massage or kneading once begun, it must be kept up until there is no longer tendency to stasis, otherwise it will do more harm than good. If it is not to be well done, it were better not begun.

On the whole, the *System of Obstetrics by American Authors* is entitled to take a place in the very front rank of works of its class, come from what land they may. D. T. S.

Correspondence.

LETTER FROM GERMANY.

During the last week the German papers have contained a number of articles relating to the work which it is understood Professor Koch is now doing in the matter of finding a remedy for that direful malady, tuberculosis. These articles were all to the effect that Prof. Koch had discovered such a remedy, and has so stated. He defers the publication of the result of his recent work only that his observations may be more complete. His observations are now being carried on quite privately in a hospital in Berlin, and he is the more unwilling to make any half-way statement, because some remarks which he made at the late International Congress have been misinterpreted. This much, however, the inquisitive reporters claim to have had from him, that the remedy is organic in nature and works its effects through inoculation, as does the vaccine virus. Further, that not only is tuberculosis prevented, but that it is actually cured where existing. If it be true, Professor Koch has completed a work so worthily begun by the discovery of the tubercle bacillus which will confer on the human race a boon certainly not less than that conferred by Jenner in the discovery of the vaccine virus.

In Professor Treudenburg's surgical clinic there is now being employed a glue for holding dressings in place which has many things to commend it. It is designed to be used in all those cases where elastic collodion and solutions of rubber are found so convenient, especially in holding dressings over flexures, while at the same time permitting free motion of the parts.

It has the advantage of not cracking or breaking, of holding firmly, of being very pliable, and permitting a great amount of motion, and lastly, of not preventing the exercise of the function of the skin over which it is placed. Therefore there does not occur a peeling off of the upper layers of epithelium with a tendency to eczema. This glue is commended by Unna, and composed of glycerin, gelatin, and water, of each thirty parts, and oxide of zinc, ten parts. This makes what is known as the thick paste. The thin paste has glycerin thirty parts, gelatin twenty parts, water forty parts, and zinc oxide ten parts. The mixing of these elements is of course done over heat. The paste is to be liquefied over a water bath when needed. When ready to apply, dry the part well with a brush, make a ring around the part to be inclosed, then lay on the gauze of the dressing, taking care to have the pieces cut large enough to allow the edges to extend into the ring of paste already laid on. Over this lay a single or double layer of gauzes cut somewhat larger, and then paint the whole over with the paste. To complete the dressing, daub it over with a bunch of cotton held in the hand; enough will adhere to complete a very handsome dressing. It is readily removed with warm water.

As the question of method in operating for hernia has been much discussed, especially by New York surgeons, it is worth while remarking that Professor Treudenburg is doing McEwen's operation.

The abscesses of tuberculosis inflammations are being largely treated here by injections of iodoform in olive oil (one to ten). A needle rather larger than the ordinary hypodermatic is employed, and the pus is allowed to escape through the needle before the injection is made. But no stress is laid on this evacuation. The injection of iodoform and oil is then made,

varying in quantity according to the size of the abscess, and is repeated once or twice weekly. I have seen this treatment employed, both in the abscesses in the neighborhood of joints and in tuberculous testes, with marked improvement.

JAMES B. BULLITT.

Bonn, November, 1890.

Abstracts and Selections.

THE SHUTTLE-PULSE AND ITS PORTENT.—There is a peculiar pulse, says a writer in the *St. Louis Medical and Surgical Journal*, which I have sometimes felt, but never without a shudder, when in the radials of those whom I have loved—never without grave prognostic impression whenever perceived in any patient. I mean the shuttle-pulse, as I would call it—a pulse in which the pulse-wave passes under your finger as if it were floating something solid as well as liquid—that something passes along the blood-current under your finger like the weaver's shuttle through the loom. I have felt it in cases only where the blood was hydremic and a local rheumatic inflammation existed, or had already existed, within the heart. I have called it the shuttle-pulse because I can liken it to nothing else, and because the impression it makes suggests that name. If you have ever felt this pulse, did you ever know of a patient recovering after its appearance? Did you ever know a patient, after its appearance, to escape the consequences of embolic closure of vessels? To me it is the pulse of fibrinous coagula going the rounds of the circulation. Its portent has ever been evil. It is a pulse of dark prognosis and painful memories—the pulse of impending death in part or whole. I think I have never known a patient to live after such a pulse had been detected. It is the pulse of fatal rheumatic endo-carditis or endo-arteritis and its sequent or associate anemia and emboli. *Medical Record.*

LUPUS AND TUBERCLE.—Dr. Krokiewicz, in a series of articles in the *Przegląd Lekarski*, discusses the evidence for and against the theory of the identity of lupus with tubercle, and describes his own experiments in connection with this subject. He examined fifteen cases of from six months' to fifteen years' duration, most of the patients being children. In three cases Koch's bacilli were easily found. In the other twelve they were very difficult to discover, one case only showing two bacilli in forty-five sections; but that the tubercle virus was present was proved by the effects of inoculating ani-

mals with particles of the lupoid tissue. Of twenty-three rabbits and one guinea-pig thus inoculated, five rabbits died from acute peritonitis, while four of the remaining nineteen developed general tuberculosis. Most of the inoculations were performed by injections into the peritoneal cavity. Some were performed on the eye and ear, but these inoculations were ineffectual. Dr. Krokiewicz entertains no doubt that lupus is a tuberculous affection of the skin, but considers that the quantity of tubercle virus is very small.—*London Lancet.*

MASSAGE IN HEADACHE.—Dr. Norström, finding that a good many cases of headache occur where, though the symptoms are more or less like those of migraine, the remedies suited to that affection are of but little use, examined the heads of such patients carefully, and came to the conclusion that the pain must depend upon inflammatory thickenings existing at the insertion of various muscles, especially the sterno-mastoid, the temporal, the scaleni, the trapezius, and the occipito frontalis. These indurations do not usually produce any local pain, and therefore are generally unnoticed both by physician and patient. They are commonly the result of "taking cold," and the headaches they cause can be traced to changes in the weather. Dr. Norström obtains excellent results by regular massage of these indurated spots, the sittings lasting for about a quarter of an hour. Similar treatment is also efficacious where the headache is due, as it sometimes is, to enlarged lymphatic glands. Of course, little result can be expected from massage in headaches of anemic or hysterical origin, or where there is organic cerebral disease.—*London Lancet.*

TWO CASES OF PLACENTA PREVIA.—(J. Christian Simpson, M. B., Edinburgh.) I give a few brief notes of two cases of placenta previa which were under my care—one treated successfully by turning, the other fatal from *post-partum* hemorrhage after turning. The latter was a woman, aged forty-five, in her ninth pregnancy. I was hurriedly summoned to her, being told she had a fit. On my arrival she was pale and blanched, somewhat alcoholic, like her attendants. The mattress was nearly soaked through with blood, and had been soaked through a week previously, when hemorrhage first took place, but no treatment or advice was adopted. I found a central placenta previa and pretty free bleeding. As soon as possible I administered chloroform, dilated, and turned. The child was dead, and was evidently about the eighth month. There was considerable hemorrhage, but ultimately the

uterus contracted and the patient was tolerably well. Unfortunately I was obliged to leave her in about one hour and a half, and on my return there was again considerable bleeding, which, however, was soon stopped by the hot douche and the hand *in utero*. Notwithstanding the administration of ergot, brandy, and ether injections, combined with bandaging and elevating the extremities, the patient gradually sank twelve hours after delivery.

On this case I would only remark that she was an alcoholic, that more or less severe hemorrhage had taken place previous to my seeing her, and that when seen she was primed with alcohol, as were also her friends, who did not carry out my instructions when I had to leave. Such a subject would be no more suitable for an abdominal operation under the social and physical circumstances than she unfortunately was for the obstetric treatment applied.

The other case was that of a woman, aged thirty-seven, in her seventeenth pregnancy, about the eighth month; but she was uncertain, as from the time of supposed impregnation she had been free from hemorrhage for only two months, about the fifth month. Her last child had died two months before, aged fourteen months. For the past six weeks the patient had been losing blood more or less, but she had always been going about. Fetal movements were lively. On September 6th she had more severe hemorrhage than usual, but this was less next day. However, on the morning of September 8th I was called to see her in the absence of my friend, Dr. Kipling, her medical attendant. She was up and dressed, but very pale. The os was found to be dilated to about the size of a half-crown, through which I could feel the head on the left side and the placenta to a small extent on the right. There were slight uterine contractions. She was ordered to keep strictly quiet in bed, and an opiate was administered. In six hours, finding the hemorrhage continued, I administered chloroform, dilated, found the placenta much more central, separated it up for some distance, and turned. There was some troublesome delay in extracting the head, and when that and the removal of the placenta were accomplished patient was extremely weak and pallid; pulse 160. I injected ergotine (Bonjean) and half a dram of ether twice. The pulse improved and came down to 120. Uterus contracted nicely. Her legs were raised on the back of a chair put on the bed. Half an ounce of brandy, egg, and milk were given every half hour or so, and this she fortunately retained. The child was dead. The further progress of the case was one of recovery, uninterrupted by any unusual event, except

slight cellulitis on the left side, which is now better.

In Mr. Tait's hands she would most probably have recovered and had a live child, as well as being saved the possible recurrence of this condition; but, excepting the latter advantage, I see nothing to be desired in the immediate result as regards the mother.

Though possessed of current abdominal surgical views to the full in general, still in this particular I must confess that the ordinary obstetric treatment in ordinary hands seems to me most capable of giving a satisfactory result.—*British Medical Journal*.

A JAPANESE LUNG DISEASE.—In a work which he has recently published on Japan, Dr. Vincent, a medical officer of the French navy, describes a disease of the lung which he believes to be peculiar to that country. It is caused by a parasite, the *distoma pulmonale*, and is characterized by hemoptysis occurring several times a day for ten or fifteen years or longer, and ending in dangerous hemorrhage. The *distoma pulmonale* is cylindrical in form, and measures from 8 to 10 millimeters in length and 5 to 6 in breadth. It has a very muscular buccal sucker. Its ova are 0.13 of a millimeter in length and 0.07 in breadth, oval in shape, brown in color, and covered with a thin membrane. The parasite makes its abode in little cavities at the periphery of the lungs, which communicate with the bronchi by narrow openings. These cavities contain epithelial debris, red blood corpuscles, leucocytes, and innumerable ova of the distoma—all these elements being blended together in a sort of pulp, which is expectorated from time to time. M. Rémy, who has made a special study of the disease at Tokio, has met with it in the majority of Japanese servants in the employment of Europeans.—*Ibid*.

TREATMENT OF A "COLD" BY SALICYLATE OF SODA.—The Memphis Medical Journal says of this remedy: "Salicylate of sodium in free doses gives as satisfactory results in the treatment of 'bad colds' as it does in cutting short tonsillitis. Sodii salicylatis, ʒss; syr. auranti cort. ʒss; aquæ menth. piper., ad. ʒiv. M. Sig. A dessertspoonful every three or four hours. A dose every three hours until a free specific influence of the salicylate—tinnitus aurium—is observed will so far control the symptoms that the aching of the brow, eyes, nose, etc., will cease. The sneezing and 'running from the nose' will also abate and will disappear in a few days, not leaving, as is usual under other treatment, a cough, from the extension of the inflammation to the bronchial tubes.

The American Practitioner and News

"NEC TENUI PENNÂ."

Vol. X. SATURDAY, NOVEMBER 22, 1890. No. 11.

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A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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CONSUMPTION CURE.

Koch's therapeutie new departure continues to be the absorbing theme in medical circles. The discussion in the newspapers is reduced to an occasional dispatch from the center of operations, but the foreign and home medical journals are devoting large space to the subject, which is filled with valuable matter.

Gleanings from these sources at this date put the question in about this shape:

1. The "brownish transparent liquid" which is supposed to have such marvelous curative power is neither an attenuated tubercular virus, nor the solution of any inorganic salt; but is probably one of the alkaloids, or perhaps albuminoses, developed during the culture of tubercle bacilli under certain conditions. This theory gets color from the fact, as worked out by two Englishmen, Martin and Hankin, that a certain substance (an albuminose) could be isolated as a bi-product in the culture of the anthrax bacillus, which injected under the skin of animals gives them immunity of the disease. If this be true, Koch is working simply along the line indicated by the labors of Pasteur.

2. Second, various theories are put forth to explain why Dr. Koch keeps the nature of his discovery a secret.

His remark that he "can make no statement respecting the origin and preparation of the remedy, as his research is not yet completed," is not credited by those who know the character of the professor's former finished work. It may be that the fear that unskilled persons would attempt its manufacture and thus do mischief is the motive, but it is believed in Berlin that the delay of the Government in furnishing Dr. Koch with a clinic and bacteriological institute is the real reason for the professor's silence upon this point. "He is determined to hold over his secret until all he thinks necessary for the realization of his scheme shall have been granted him."

He is warmly defended from the reproach of having made a premature publication of his researches by Prof. Virchow and the Minister of Education, Dr. Von Gosler.

But whether the manifesto of Koch be premature or not, the profession has shown unreflecting haste in thinking to apply at once in practice a remedy, the efficacy of which in man can only be tested in institutes provided for the purpose, by skilled hands, while the results can be read only after the lapse of considerable time. It is not too much to say that, should the remedy prove curative in ordinary tuberculosis, and of practicable application in the hands of the average physician, at least a year will be needed to settle the fact. The present rush of doctors to Berlin is simply ridiculous, and will probably benefit nobody but the hotel keepers and runners of lines of transportation thitherward and homeward.

The rush of consumptives to the same place, especially in this season, is insane, as the undertaker and Charon are beginning to bear witness.

Numerous eminent German clinicians, with an English doctor or two, have endeavored to put the new remedy to the test.

Prof. Von Bergmann, Dr. W. Levy, Profs. Fraenzel, Gerhardt, and Ziemssen, with Mr. Malcolm Morris and Dr. Pringle, have all taken a hand in the new game against death. The consensus of opinion so far is that the new remedy is competent to cure lupus (a rare tuberculous disease), that it is well-nigh useless in advanced phthisis pulmonalis, of promising efficacy in incipient phthisis, and that it may

forestall the disease in those who by heredity and surroundings are likely to develop tuberculosis.

The new method is not without its dangers. Prof. Von Bergmann had one patient who came near turning up his toes under the influence of the first injection, while Prof. Ziemssen (so says a dispatch) treated five cases (two girls and a young man in advanced tuberculosis, a child with tubercular meningitis, and a hardened old soldier with lupus), with death (in some after the first injection) as the result in every case.

In view of the above and many other considerations, we conclude that nothing definite can be predicated of the new treatment at this date, and that the small fry in general and their patients in particular had better stay at home and pursue the even tenor of their way until the great men at Berlin shall have had time to prove the worth and adaptability of the discovery.

Notes and Queries.

A FURTHER COMMUNICATION ON A CURE FOR TUBERCULOSIS. *—(Prof. Robert Koch, M. D., of Berlin.) In an address delivered before the International Medical Congress I mentioned a remedy which conferred on the animals experimented upon an immunity against inoculation with the tubercle bacillus, and which arrested tuberculous disease. Investigations have now been carried out on human patients, and these form the subject of the following observations. It was originally my intention to complete the research, and especially to gain sufficient experience regarding the application of the remedy in practice, and its production on a large scale before publishing any thing on the subject; but, in spite of all precautions, so many accounts have reached the public, and in such an exaggerated and distorted form, that it seems imperative, in order to prevent false impressions, to give at once a review of the position of the subject at the present stage of the inquiry. It is true that this review can, under these circumstances, be

only brief, and must leave open many important questions.

The investigations have been carried on under my direction by D. A. Libbertz and Stabsarzt, Dr. E. Pfuhl, and are still in progress. Patients were placed at my disposal by Prof. Brieger, from his polyclinic; Dr. W. Levy, from his private surgical clinic; Geheimrath, Drs. Fräntzel, and Oberstabsarzt Kohler, from the Charite Hospital; and Geheimrath v. Bergmann, from the surgical clinic of the University. I wish to express my thanks to these gentlemen.

As regards the origin and the preparation of this remedy, I am unable to make any statement, as my research is not yet concluded. I reserve this for a future communication.

The remedy is a brownish, transparent liquid, which does not require special care to prevent decomposition. For use, this fluid must be more or less diluted, and the dilutions are liable to undergo decomposition if prepared with distilled water. As bacterial growths soon develop in them they become turbid, and are then unfit for use. To prevent this, the diluted liquid must be sterilized by heat and preserved under a cotton-wool stopper, or, more conveniently, prepared with a one-half-per-cent solution of phenol.

It would seem, however, that the effect is weakened both by frequent heating and by mixture with phenol solution, and I have therefore always made use of a freshly-prepared solution. Introduced into the stomach the remedy has no effect. In order to obtain a reliable effect it must be injected subcutaneously, and and for this purpose we have exclusively used the small syringe suggested by me for bacteriological work. It is furnished with a small India-rubber ball, and has no piston. This syringe can easily be kept aseptic by the use of absolute alcohol, and to this we attribute the fact that not a single abscess has been observed in the course of more than a thousand subcutaneous injections.

The place chosen for the injection, after several trials of other places, was the skin of the back between the shoulder-blades and the lumbar region, because here the injection led to the least local reaction, generally none at all,

* Translated from the original article published in the *Deutsche medicinische Wochenschrift*, November 14, 1890.

and was almost painless. As regards the effect of the remedy on the human patient, it was clear from the beginning of the research that in one very important particular the human being reacts to the remedy differently from the animal generally used in experiments, namely, the guinea-pig—a new proof for the experimenter of the all-important law that experiment on animals is not conclusive, for the human patient proved extraordinarily more sensitive than the guinea-pig. As regards the effect of the remedy, a healthy guinea-pig will bear a subcutaneous injection of 2 cubic centimeters, and even more, of the liquid without being sensibly affected; but in the case of a full grown healthy man 0.25 cubic centimeter suffices to produce an intense effect. Calculated by the body-weight, one fifteen-thousandth part of the quantity which has no appreciable effect on the guinea-pig acts powerfully on the human being.

The symptoms arising from an injection of .25 cubic centimeter I have observed after an injection made in my own upper arm. They were briefly as follows: three to four hours after the injection there came on pain in the limbs, fatigue, inclination to cough, difficulty of breathing, which speedily increased in the fifth hour, and were unusually violent. A chill followed, which lasted almost an hour. At the same time there were nausea, vomiting, and a rise of body temperature to 39.6° C.

After twelve hours all these symptoms abated, the temperature fell, and on the next day it was normal. A feeling of fatigue and pain in the limbs continued for a few days, and for exactly the same period of time the site of injection remained slightly painful and red. The smallest quantity of the remedy which will affect the healthy human being is about 0.01 cubic centimeter, equal to 1 cubic centimeter of the one-hundredth dilution. As has been proved by numerous experiments, when this dose is used reaction in most people shows itself only by slight pains in the limbs and transient fatigue. A few showed a rise of temperature to about 38° C.

Although the effect of the remedy in equal doses is very different in animals and in human beings, if calculated by body-weight, in some

other respects there is much similarity in the symptoms produced, the most important of these resemblances being the specific action of the remedy on the tuberculous process, the varieties of which I will not here describe. I will make no further reference to its effects on animals, but I will at once turn to its extraordinary action on tuberculosis in human beings. The healthy human being reacts either not at all, or scarcely at all, as we have seen, when 0.01 cubic centimeter is used. The same holds good with regard to patients suffering from diseases other than tuberculosis, as repeated experiments have proved; but the case is very different when the disease is *tuberculosis*. A dose of 0.01 cubic centimeter injected subcutaneously into tuberculous patients causes a severe general reaction as well as a local one.

I gave children aged from two to six years one tenth of this dose, that is to say, 0.001 cubic centimeter, very delicate children only 0.0005 cubic centimeter, and obtained powerful, but in no way dangerous reaction. The general reaction consists in an attack of fever, which usually begins with rigors, and raises the temperature above 39°, often up to 40°, and even 41° C. This is accompanied by pain in the limbs, coughing, great fatigue, and often sickness and vomiting. In several cases a slight icteroid discoloration was observed, and occasionally an eruption like measles on the chest and neck. The attack usually begins four to five hours after the injection, and lasts from twelve to fifteen hours. Occasionally it begins later and then runs its course with less intensity.

The patients are very little affected by the attack, and as soon as it is over feel comparatively well, generally better than before. The local reaction can be best observed in cases in which the tuberculous affection is visible; for instance, in cases of lupus changes take place which show the specific anti-tuberculous action of the remedy to a most surprising degree. A few hours after an injection into the skin of the back—that is, in a spot far removed from the diseased area on the face or elsewhere—the lupus begins to swell and to redden, and this it does generally before the initial rigor. During the fever the swelling and redness increase,

and may finally reach a high degree, so that the lupus tissue becomes brownish and necrotic in places where the growth was sharply defined. We sometimes found a much swollen and brownish spot surrounded by a whitish edge almost one centimeter wide, which again was surrounded by a broad band of bright red.

After the subsidence of the fever the swelling of the lupus tissue gradually decreases and disappears in about two or three days. The lupus spots themselves are then covered by a soft deposit, which filters outward and dries in the air. The growth then changes to a crust, which falls off after two or three weeks, and which, sometimes after only one injection, leaves a clean, red cicatrix behind. Generally, however, several injections are required for the complete removal of the lupus tissue; but of this, more later on. I must mention as a point of special importance that the changes described are exactly confined to the parts of the skin affected with lupus. Even the smallest nodules and those most deeply hidden in the lupus tissue go through the process and become visible in consequence of the swelling and change of color, while the tissue itself in which the lupus changes have entirely ceased remains unchanged. The observation of a lupus case treated by the remedy is so instructive, and is necessarily so convincing, that those who wish to make a trial of the remedy should, if possible, begin with a case of lupus.

This specific action of the remedy in these cases is less striking, but is as perceptible to the eye and touch as are the local reactions in cases of tuberculosis of the glands, bones, joints, etc. In these cases swelling, increased sensibility, and redness of the superficial parts are observed. The reaction of the internal organs, especially of the lungs, is not at once apparent, unless the increased cough and expectoration of consumptive patients after the first injections be considered as pointing to a local reaction in these cases. The general reaction is dominant; nevertheless, we are justified in assuming that here, too, changes take place similar to those seen in lupus cases. The symptoms of reaction above described occurred, without exception, in all cases in which a tuberculous process was present in the organism after the use of 0.01

cubic centimeter, and I think I am justified in saying that the remedy will therefore, in the future, form an indispensable aid to diagnosis.

By its aid we shall be able to diagnose doubtful cases of phthisis; for instance, cases in which it is impossible to obtain certainty as to the nature of the disease by the discovery of bacilli or elastic fibers in the sputum or by physical examination. Affections of the glands, latent tuberculosis of bone, doubtful cases of tuberculosis of the skin, and similar cases will be easily and with certainty recognized. In cases of tuberculosis of the lungs or joints which have been apparently cured we shall be able to make sure whether the disease has really finished its course, and whether there be still some diseased spots from which it might again arise as a flame from a spark hidden by ashes.

Of greater importance, however, than its diagnostic use is the therapeutic effect of the remedy. In the description of the changes which a subcutaneous injection of the remedy produces in portions of the skin affected by lupus I mentioned that after the subsidence of the swelling and decrease of the redness the lupus tissue does not return to its original condition, but that it is destroyed to a greater or less extent and disappears. Observation shows that in some parts this result is brought about by the diseased tissue becoming necrotic, even after but one sufficiently large injection, and at a later stage it is thrown off as a dead mass. In other parts a disappearance or, as it were, a necrosis of the tissue seems to occur, and in such case the injection must be repeated to complete the cure.

In what way this process of cure occurs can not as yet be stated with certainty, as the necessary histological investigations are not complete; but this much is certain, that there is no question of a destruction of the tubercle bacilli in the tissues, but only that the tissue inclosing the tubercle bacilli is affected by the remedy. Beyond this there is, as is shown by the visible swelling and redness, considerable disturbance of the circulation, and evidently in connection therewith deeply-seated changes in its nutrition which cause the tissue to die more or less quickly and deeply, accord-

ing to the extent of the action of the remedy. To recapitulate, the remedy does not kill the tubercle bacilli, but the tuberculous tissue, and this gives us clearly and definitely the limit that bounds the action of the remedy.

It can influence living tuberculous tissue only, and has no effect on dead tissue; as, for instance, necrotic cheesy masses, necrotic bones, etc., nor has it any effect on tissues made necrotic by the remedy itself. In such masses of dead tissue living tubercle bacilli may possibly still be present and are either thrown off with the necrosed tissue, or may possibly enter the neighboring and still living tissue under certain circumstances of the therapeutic activity. If the remedy is to be rendered as fruitful as possible, this peculiarity in its mode of action must be carefully observed. At first the living tuberculous tissue must be caused to undergo necrosis, and then every thing must be done to remove the dead tissue as soon as possible, as, for instance, by surgical interference.

Where this is not possible, and where the organism is unassisted in throwing off the tissue slowly, the endangered living tissue must be protected from fresh incursions of the parasites by continuous applications of the remedy. The fact that the remedy makes tuberculous tissue necrotic, and acts only on the living tissue, helps to explain another characteristic thereof, namely, that it can be given in rapidly-increasing doses. At first sight this phenomenon would seem to point to the establishment of tolerance; but since it is found that the dose can, in the course of about three weeks, be increased to five hundred times the original amount, tolerance can no longer be accepted as an explanation. As we know of nothing analogous to such a rapid and complete adaptation to an extremely active remedy, the phenomenon must rather be explained in this way, that in the beginning of the treatment there is a good deal of tuberculous living tissue, and that consequently a small amount of the active principle suffices to cause a strong reaction, but by each injection a certain amount of the tissues capable of reacting disappears, and then larger doses are necessary to produce the same amount of reaction as before.

Within limits, a certain degree of habitu-

ation may be perceived as soon as the tuberculous patient has been treated with increasing doses; for so soon as the point is reached at which reaction is as feeble as that of a non-tuberculous patient, then it may be assumed that all tuberculous tissue is destroyed. Then the treatment will only have to be continued by slowly increasing doses and with interruptions, in order that the patient may be protected from fresh infections while bacilli are still present in the organism; and whether this conception and the inference that follows from it be correct, the future must show. They were conclusive, as far as I am concerned, in determining the mode of treatment by the remedy, which in our investigations was practiced in the following manner. To begin with the simplest case, lupus.

In nearly every one of these cases I injected the full dose of 0.01 cubic centimeter from the first. I then allowed the reaction to come to an end, and then, after a week or two, again injected 0.01 cubic centimeter, continuing in the same way until the reaction became weaker and weaker and then ceased. In two cases of facial lupus the lupus spots were thus brought to complete cicatrization by three or four injections; the other lupus cases improved in proportion to the duration of treatment.

All these patients had been sufferers for many years, having been previously treated unsuccessfully by various therapeutic methods. Glandular, bone, and joint tuberculosis was similarly treated, large doses at long intervals being made use of. The result was the same as in the lupus cases, namely, a speedy cure in recent and slight cases, slow improvement in severe cases.

The circumstances were somewhat different in phthisical patients, who constituted the largest number of our patients. Patients with decided pulmonary tuberculosis are much more sensitive to the remedy than those with surgical tuberculous affections.

We were obliged to diminish the dose for the phthisical patients, and found that they almost all reacted strongly to 0.002 cubic centimeter, and even to 0.001 cubic centimeter. From this first small dose it was possible to rise more or less quickly to the amount that is well borne

by other patients. Our course was generally as follows: An injection of 0.001 cubic centimeter was first given to the phthisical patient, and from this a rise of temperature followed, the same dose being repeated once a day until no reaction could be observed. We then increased the dose to 0.002 cubic centimeter, until this was borne without reaction, and so on, increasing by 0.001, or at most 0.002 to 0.005 cubic centimeter.

This mild course seemed to be imperative in cases in which there was great debility. By this mode of treatment the patient can be brought to tolerate large doses of the remedy with scarcely a rise of temperature. But patients of greater strength were treated from the first partly with larger doses and partly with frequently repeated doses. Here it seemed that the beneficial results were more quickly obtained. The action of the remedy in cases of phthisis generally showed itself as follows: Cough and expectoration were generally increased a little after the first injection, then grew less and less, and in the most favorable cases entirely disappeared. The expectoration also lost its purulent character and became mucous. As a rule, the number of bacilli decreased only when the expectoration began to present a mucous appearance. They then entirely disappeared, but were again observed occasionally until expectoration completely ceased. Simultaneously the night-sweats ceased, the patients' appearance improved, and they increased in weight within from four to six weeks.

Patients under treatment for the first stage of phthisis were freed from every symptom of disease and might be pronounced cured; patients with cavities not yet too highly developed improved considerably and were almost cured, and only in those whose lungs contained many large cavities could no improvement be proved. Objectively, even in these cases the expectoration decreased and the subjective condition improved. These experiences lead me to suppose that phthisis in the beginning can be cured with certainty by this remedy. This statement requires limitation, in so far as at present no conclusive experiences can be possibly brought forward to prove whether the cure is lasting.

Relapses naturally may occur, but it can be assumed that they can be cured as easily and quickly as the first attack. On the other hand, it seems possible that, as in other infectious diseases, patients once cured may retain their immunity; but this, too, for the present, must remain an open question. In part, this may be assumed for other cases, when not too far advanced; but patients with large cavities, who suffer from complications caused, for instance, by the incursion of other pus-forming micro-organisms into the cavities or by incurable pathological changes in other organs, will probably obtain lasting benefit from the remedy in only exceptional cases. Even such patients, however, were benefited for a time. This seems to prove that in their cases, too, the original tuberculous disease is influenced by the remedy in the same manner as in the other cases, but that we are unable to remove the necrotic masses of tissue with the secondary suppurative processes.

The thought involuntarily suggests itself that the relief might possibly be brought to many of these severely afflicted patients by a combination of this new therapeutic method with surgical operations (such as the operation for empyema), or with other curative methods; and here I would earnestly warn people against conventional and indiscriminate application of the remedy in all cases of tuberculosis. The treatment will probably be quite simple in cases in which the beginning of phthisis and simple surgical cases are concerned, but in all other forms of tuberculosis medical art must have full sway by careful individualization and making use of all other auxiliary methods to assist the action of the remedy.

In many cases the decided impression was created that the careful nursing bestowed on the patient had a considerable influence on the result of the treatment, and I am in favor of applying the remedy in proper sanatoria as opposed to treatment at home and in the out-patient room. How far the methods of treatment already recognized as curative, such as mountain climate, fresh air treatment, special diet, etc., may be profitably combined with the new treatment can not yet be definitely stated; but I believe that these therapeutic methods will

also be highly advantageous when combined with the new treatment. In many cases, especially in the convalescent stage, as regards tuberculosis of the brain and larynx, and miliary tuberculosis, we had too little material at our disposal to gain proper experience.

The most important point to be observed in the new treatment is its early application. The proper subjects for treatment are patients in the initial stage of phthisis, for in them the curative action can be most fully shown, and for this reason, too, it can not be too seriously pointed out that practitioners must in the future be more than ever alive to the importance of diagnosing phthisis in as early a stage as possible. Up to the present time the proof of tubercle bacilli in the sputum was considered more as an interesting point of secondary importance, which, though it made diagnosis more certain, could not help the patient in any way, and which in consequence was often neglected.

This I have lately repeatedly had occasion to observe in numerous cases of phthisis which had generally gone through the hands of several doctors without examination of the sputum having been made. In the future this must be changed. A doctor who shall fail to diagnose phthisis in its earliest stage by all methods at his command, especially by examining the sputum, will be guilty of the most serious neglect of his patient, whose life may depend upon the early application of the specific treatment. In consequence, in doubtful cases medical practitioners must make sure of the presence or absence of tuberculosis, and then only will the new therapeutic method become a blessing to suffering humanity, when all cases of tuberculosis are treated in their earliest stage, and we no longer meet with neglected serious cases forming an inextinguishable source of fresh infections. Finally, I would remark that I have purposely omitted statistical accounts and descriptions of individual cases, because the medical men who furnished us with patients for our investigations have themselves decided to publish the description of their cases, and I wished my account to be as objective as possible, leaving to them all that is purely personal.—*Philadelphia Medical News*.

A NEW TEST FOR ALBUMEN IN URINE.—The following tests have been published by Zouchlos (*Rundschau*, 1890), and are recommended on account of their simplicity and accuracy: A solution of one part of acetic acid and and six parts of one-per-cent solution of corrosive sublimate is prepared; to this the suspected urine is slowly added, which at once produces a distinct cloudiness. This test is not affected by peptones, uric acids, or the phosphates. A still more delicate test than the above has been proposed by Zouchlos: Three ounces of a ten-per-cent solution of rhodium potash, with six drams of acetic acid; of this a few drops are added to the suspected urine. If albumen is present, there is at once formed a distinct cloudiness, which is insoluble in excess of the solution.—*Virginia Medical Monthly*.

THEINE IN THE TREATMENT OF NEURALGIA. Every now and then cases of neuralgia are reported which have been treated successfully by the hypodermic injection of theine. The local anesthetic action of this alkaloid was, we believe, first brought to the attention of the profession by Dr. Thomas J. Mays, about four years ago, who, from his experimental and clinical investigation, concluded that its physiological action is not identical with that of caffeine, and that its analgesic action is more prompt and more permanent in neuralgia than that of morphine or of any of the other agents in common use for the purpose of deadening pain.—*Med. and Surg. Rep.*

FLUOROFORM.—The Monthly Journal of Pharmacy states that a French chemist, M. Meslans, has succeeded in preparing fluoroform. It is the analogue of chloroform and iodoform, the chlorine and iodine of these substances being replaced by fluorine in fluoroform. But whereas chloroform is a liquid and iodoform is a solid at ordinary temperatures, fluoroform is a gas. It is colorless, and has a pleasant ethereal smell, recalling that of chloroform.

DR. C. HANFIELD JONES, of London, died at his residence, on September 30th, aged seventy-two years. He was best known by his work on "Functional and Nervous Diseases."

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., DECEMBER 6, 1890.

No. 12.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

THREE LAPAROTOMIES OF MORE THAN ORDINARY INTEREST.

BY DOUGLAS MORTON, A.M., M.D.

Consulting Gynecologist to the Louisville City Hospital.

CASE 1. *Obstruction and Inflammation of the Gall Bladder; Aspiration and Subsequent Abdominal Section; Recovery.* The interest connected with the first of these cases lies not at all in the abdominal section itself, but in the pathological conditions found on opening the peritoneum, and in the result of other measures carried out in the treatment of the case. Mrs. M., a feeble person of cachectic aspect, aged thirty, came to me giving a history of repeated attacks of biliary colic during the past four years, and of almost constant bad health all that time. Her chief trouble was pain in the right hypochondrium, in which region I found a tumor that projected below the costal border, reaching an inch lower than the umbilicus and to within two inches of the median line, and measured about four inches across and five vertically. As doubt as to the nature of the tumor had been expressed by several prominent physicians under whose charge she had been at different times, and the patient was not willing at this time to submit to exploratory incision, I used the aspirator to aid in diagnosis, and obtained a clear, yellowish, viscid fluid that contained cholesterin crystals and a small quantity of pus. This, taken with other evidence, I thought conclusive enough.

The aspiration caused some reaction, and the

tumor became more distended and painful than before. Ten days later I aspirated again, this time drawing off over two ounces of a fluid in which the quantity of pus had evidently increased very much. On this occasion I injected through the needle an ounce of a weak solution of compound tincture of iodine as an antiseptic. This was speedily followed by still more reaction, and in a few days distension became so great and painful that aspiration, simply for immediate relief, became urgent.

In the meantime I had become disgusted with the procedure, and the patient was willing to submit to the knife. Accordingly a few days afterward, aided by Drs. Cartledge and Bullock, I set about doing the operation of cholecystotomy, but just as I reached the peritoneum the patient fell into an alarming condition from chloroform poisoning, making it necessary to suspend our work and resort to means of resuscitation. In time she rallied, and the operation was continued by opening the peritoneum. It was now found that the whole tumor was covered by the hypertrophied right lobe of the liver, the thin border of which extended to an inch below the level of the umbilicus. Under this, by passing the fingers through the lower part of the wound, the distended gall-bladder could be easily felt. At this juncture the patient was beginning again to do badly under the anesthetic, and as it had been found that to complete the operation would involve considerably prolonged work it was deemed best to leave it incomplete.

The wound healed in a few days by first intention, and much to our surprise the tumor gradually diminished in size until at the end of three months it became inappreciable.

As enlargement of the liver is common in cholecystitis—indeed, perhaps always present in cases of long standing—the condition found

in this case of a cyst entirely overlapped by the liver is likely not at all rare, though I have the record of only one case, reported by Dr. Shepherd, of Montreal, at a late meeting of the Canadian Medical Society. The presence of this condition would obviously greatly increase the difficulty of either the usual operation of cholecystotomy in which a biliary fistula is established, or of cholecystectomy.

The operation apparently most feasible in such a case would be a cholecystotomy in which the incision through the cyst wall is closed by sutures and the viscus dropped back. In order, however, to do the necessary manipulation, a more than usually long parietal incision would be required.

The ultimate healing of the cholecystitis may have been due to dislodgment of the obstructing calculus caused by the great distension of the cyst that followed the iodine injection, and to the arrest of suppuration by the injected iodine.

CASE 2. Laparo-colotomy for Rectal Stricture and Ulceration; Recovery; Condition two years after; Present Status of Colotomy. A report of this case was published in the American Practitioner and News two years ago, and at that time I thought the case could be justly considered one of especial interest, as being the first successful colotomy that had been done in this city. My apology for presenting this case again is, that I can describe the condition of the patient two years after the operation, and that as I quoted in my first account the denunciatory language used by leading authors against the operation not many years before. I can now quote recent expressions from leading authors of the present day showing a most complete change of opinion. This latter I am all the more willing to do, as I believe there still prevails in this city a prejudice against the operation.

The patient, a woman aged thirty, had been suffering from a broad, tight stricture, complicated with extensive ulceration and a recto-vaginal fistula. At the time of the operation she was in a deplorable condition, and by all rules a proper subject for colotomy. The operation was essentially that of Cripps; the result, speedy recovery with immense improve-

ment of condition. Now after two years her general health is fully restored, and she has been able to earn her living as cook and laundress. She was at the hospital a short time during the past summer for diarrhea and abrasion of the mucous membrane prolapsed through the artificial anus. At this time the resident physician who saw her last tells me the circle of protruded mucous membrane was about two inches in diameter, and projected somewhat more than half an inch.

Except when she has diarrhea, this patient is not greatly annoyed with involuntary fecal discharge, and, although she can not control it, she has some premonition of its approach. The fear of becoming offensive to others would naturally deter a sensitive person from undergoing colotomy. This is certainly, in the main, unfounded.

As to the present status of the operation, I will quote from a late paper by Mr. Bryant, consulting surgeon of Guy's Hospital. He says it "is still too much regarded as a *dernier resort*. . . . This position of colotomy I, in common with a few other surgeons, have, however, never accepted. We have regarded it as the best means the surgeon has at his disposal for the relief of rectal obstruction from cancerous and other disease which is not otherwise removable. . . . Within the last ten years there has consequently been a remarkable advance in the position of colotomy." Dr. Kelsey, of New York, said recently: "As to the benefits arising from the operation, scarcely too much can be said. . . . I can only say after trying every other means of treatment, and being obliged to admit the fruitlessness of them all, I have come with most others to admit the great benefits of colotomy, and have never performed it in any case in which either the patient or myself have regretted it. . . . There can be no argument in favor of colotomy so strong as a single experience with a case of cancer of the rectum left to its own course and termination in fatal obstruction."

I consider the operation the easiest in abdominal surgery, and the safest also if not put off too long.

CASE 3. Removal of Sarcomatous Ovarian Tumor; Pedicle Treated by Unusual Method; Recov-

ery. Mrs. B., aged fifty-five, was referred to me by Dr. Prewitt, of Henry County, Ky. She was found to have an abdominal tumor about the size of a man's head, which was easily movable. It was elastic, but firm enough to lead to doubt as to its being a cystoma. Aided by Drs. Wilson, Skinner, Griswold, and Tuley, I did an ovariectomy on July 20, 1890. The tumor was found to be a cystic sarcoma, and, after a cyst in it containing a pint or more of fluid was emptied, weighed eight pounds. The only difficulty in the case arose from the practical absence of a pedicle, the deep and broad attachment of the tumor, and the unusual smallness of the pelvic cavity, which rendered it impossible to apply a ligature in the usual manner. To meet this difficulty, an *ecraseur* armed with a strong silk cord was applied, the loop was tightened, and the tumor cut off, leaving an unusually large stump. Effort was made to apply a double ligature between the loop and the body of the uterus, but this could not be done, and we were compelled to leave the *ecraseur in situ*. Under the circumstances it was thought best to wash the cavity and particularly the massive stump with a 1-10,000 bichloride solution. This was speedily washed out with warm distilled water, and the abdomen closed, with the *ecraseur* and a drainage tube projecting from it. The *ecraseur* was removed in fifty-four hours; but as a considerable quantity of blood-stained serum continued to flow, the tube was allowed to remain two days longer. Patient made an uninterrupted recovery, and was removed from the infirmary to her home in the city ten days after the operation.

A further interest attaching to this case is that solid ovarian tumors are rare. Grieg Smith states that in all their varieties they constitute only three per cent of all ovarian tumors. He states also that the mortality attending their removal is thirty-three per cent.

In the first two cases narrated the operations were done in air known to be exceptionally impure. The tissues in the field of operation were therefore washed with a solution of hydrogen peroxide. I selected this agent because for efficiency as an antiseptic it ranks among the very best, and it is at the same time absolutely non-poisonous and very slightly irritant. The only

drawback connected with its use is that it must be applied cold, but this is unimportant if its application is made over only a small surface.

LOUISVILLE

MORPHINISM; ITS PREVENTION AND CURE.

BY W. I. COTTEL, M. D.

Owing to the facilities for keeping the opium habit a secret, and the many channels through which the drug may be obtained, it is impossible to compute the number of its victims. In the great cities the vice is certainly on the increase. It claims its devotees from all classes of society. From the jewel-bedecked seal-skinned dweller in the brown-stone mansion on the avenue to the sodden-faced trull who emerges from the lowest dive on the alley, from men of leisure and refinement, surrounded by all the comforts of existence, to the "hobo" who is run into the police station for sleeping under the docks, all conditions furnish recruits to the ranks of this restless, anxious, suffering throng of habitués.

Such works as De Quincey's classic, "The Confessions of an Opium Eater," and articles which appear from time to time in the public press describing the gloomy grandeur of the opium joint, the doubtful delight of the sensuous dreamer, consequent upon what is known as "hitting the pipe," have added a few weak-minded ones to the list. The almost general use of the drug by inmates of houses of ill-fame, where it is employed for every little ailment and to blunt the moral sense of homesick and discontented girls, add others, but a very large percentage can justly lay their enthrallment at the door of the medical profession.

Our jails, workhouses, hospitals, and eleemosynary institutions generally, have morphine and hypodermic syringes within easy reach of attendants, and few are discharged from our hospitals after undergoing any painful illness or operation without a practical knowledge of the quieting effects of the drug. Nurses and *internes* frequently employ an opiate wherever the patient is restless or unmanageable without consulting the physician in charge.

The young doctor, fresh from the medical college, is crammed with the knowledge of drugs

which will relieve pain and suffering. Analgesics, hypnotics, and anesthetics are his *a, b, c's*; of their uses he has learned much, of their abuses little. A hypodermic syringe and a quantity of morphine are the first purchases he makes for his armamentarium.

To prevent the increase of this disorder it should be impressed upon the minds of every one that opium and its narcotic alkaloids are dangerous poisons which should be used, if used at all, with great caution. When the exhibition of the drug is necessary the patient should be kept in ignorance of what he is taking. The doctor should dispense his own morphia and opium (preferably in pill or tablet form of definite quantity). He should under no circumstance send a prescription containing an opiate to a pharmacy.

The pharmacist is in law required not only to refill a prescription, but he must give a copy of the recipe to his customers if it is demanded.

Physicians should be especially careful in administering opiates in trivial cases or in cases where the demand is likely to be continued, as in rheumatism and hysteria. Neuralgias, sudden colics, toothaches, even if severe, will often be relieved by sinapisms, hot or cold applications, or one of the bromides, or a single dose of chloral in extreme cases. Chloral drinkers are exceedingly rare. In an experience of fourteen years I have not yet met with a single case.

Morphinism is regarded by the general public as incurable. Many physicians have the same opinion, and private hospitals are much in favor. There is a dearth of information on the subject in our standard works on practice, and some completely ignore the subject. As nearly all "opium fiends" wish to be cured, charlatans and quacks thrive on such as possess means.

Removal of the cause, discontinuance of the drug, is the first essential. Immediate withdrawal is cruel and unscientific; it is impossible without restraint or constant espionage.

Rapid withdrawals have the same drawbacks. Both methods are often dangerous, and the tendency to relapse is greater than in the weaning method or gradual withdrawal. I am confident that no case, however chronic, is incurable provided the general health is fair. Each

individual case requires special study. Diathesis should be carefully considered, and if syphilis, struma, rheumatism, or tuberculosis exist, specific treatment will be required.

The confidence of the patient in the physician's power to cure is of the first importance. To secure this, assure him that the substitute you employ will absolutely take the place of the drug, and that he must at once and forever stop taking it. If he finds that you are giving him opium, he will have no confidence in your methods or remedies. Most sufferers who wish to be free have tried the tapering-off process and failed.

Ascertain the time and the exact quantity of the drug the patient has been taking *per diem*, and do not begin to diminish the dose until the confidence of the patient is thoroughly established in the substitute. For the past six years I have used the following, and have positively cured over forty cases, modifying it at times to suit special cases:

Morphia sulph. or tr. opii..... q. s.
 Fluid ext. viburnum prunifol... $\frac{3}{4}$ ss.;
 Elixir ammoniæ valerianæ..... $\frac{3}{4}$ iii;
 Elixir sodium bromide (gr. v. to
 the $\frac{3}{4}$)..... q. s. $\frac{3}{4}$ vi.

M. Sig: Teaspoonful when required.

This is a mixture from which one is readily weaned when the opiate is withdrawn, and I am sure that the combination possesses special value in these cases.

It is well to take plenty of time in decreasing the drug. Chronic cases, who have been taking ten grains or less of morphia a day, will usually stand the subtraction of a grain a week, though some will notice a less quantity.

The most persistent case I have ever encountered was that of an hysterical subject who became pregnant soon after beginning treatment. It was impossible to wean her completely until after childbirth, which resulted in a fine healthy boy. This case proves that this treatment may be continued for months without evil results to either the mother or the child *in utero*.

In smell and taste this combination is truly a *mistura diabolica*, and many patients will tell you that they can do without your horrible stuff long before the opiate is entirely excluded.

Societies.

RICHMOND (VA.) ACADEMY OF MEDICINE AND SURGERY.

Stated Meeting November 11, 1890, Dr. W. W. Parker, President, in the chair.

The subject for discussion being Dr. Wm. B. Gray's paper on "Indigestion, a Cause of Bright's Disease," Dr. T. J. Moore said: The subject of digestion is one of paramount importance and has enlisted the interest and claimed the attention of many of the best minds of the profession since medicine was recognized as a science. But there are still mysteries to be solved and difficulties to be surmounted before many of the phenomena connected with this process can be considered as satisfactorily explained. The conclusions which are deducted from experiments in the laboratory are, at best, inferential when considered as a solution of these problems. That there should, therefore, be a diversity of opinion in regard to many of the theories advanced in connection with this question is to be expected. But there are certain general principles governing the process of digestion which are commonly accepted.

It is well known that the action of the salivary secretions is to convert starch into sugar. It is, likewise, generally conceded that the reaction of the gastric secretions is acid, and contains a ferment which, by its action upon albuminoids, converts them into peptones and reduces them to a soluble form called chyme. This, passing into the small intestine, comes in contact with the biliary secretions, which precipitates the pepsine and assists in the emulsification of fats. The continued conversion of starch into sugar and dextrine is here carried on by the double trypsin ferment. No actual suspension of the action of pepsine occurs. Dr. Foster, of Cambridge, says that, in addition to its action upon starch and sugar, trypsin co-operates with pepsine in its action upon albuminoids. It is claimed by modern physiologists that the secretions of the small intestines are taking an active part in this process, the glands of Lieberkuhn furnishing a secretion which digests starch, those of Brunner one which assists in the digestion of albuminoids.

Reaching the large intestine, digestion is by no means necessarily suspended, and under certain circumstances the conversion of food substances into soluble form is kept up by its secretions. Physiologists at first claimed that the large intestine offered no secretion to assist in digestion, but experience with nutrient enemata contradicted them. They then insisted upon the acidulation of these enemata, saying it was utterly impossible for digestion to take place in the presence of the alkaline secretions of the large intestine. Then they resorted to the peptonizing of enemata, etc. But it is now known that when the glands of the small intestine are in a state of quiescence, those of the large intestine will take on a vicarious action, furnishing a secretion with considerable digestive power.

One fact which seems to give support to Dr. Gray's theory is that the pouring out of the secretions of both the large and small intestines involves the presence of undigested albuminoids. If albuminoid materials can escape by exosmosis externally, why may they not pass by endosmosis internally?

It is possible that digestion may be still further continued after the absorption of the materials from the alimentary canal. Bruker states that the portal vein contains casein and milk which has not undergone digestion, and other authorities go so far as to assert that digestion continues in the blood. And it seems as if there must be some manipulating material; for if it was common for undigested albumen to continue in the blood, a healthy man would be a rare exception, as albumen introduced directly into the blood undoubtedly produces albuminuria. But that it finds its way unchanged into the blood from the stomach, the speaker does not believe.

Congestion of the kidney does not constitute Bright's disease. The organ may right itself before reaching the stage of tissue transformation, cell proliferation, or other structural change in the pyramids or tubes uriniferi.

There are four leading forms of Bright's disease: (1) Acute desquamative or tubal nephritis; (2) Chronic desquamative or tubal nephritis; (3) Acute interstitial nephritis; (4) Chronic interstitial nephritis. In addition to which

there are certain ultimate changes in the nature of fatty and amyloid degenerations, all of which, in spite of the difference in their pathological condition and the diversity and multiplicity of the causes which bring them about, are recognized as forms of Bright's disease. The acute forms may be due to a variety of causes, frequently of a temporary nature, such as irritation, cold, wet, extensive burns, excessive drinking, corrosive acids, pregnancy, and the morbid poisons peculiar to contagious diseases such as scarlet fever, measles, small-pox, diphtheria, etc. The chronic forms have, in addition to the causes above mentioned, long-continued chronic indigestion, scrofula, phthisis, abscess, pyemia, syphilis, saturnism, gout, genito-urinary suppuration, or almost any constitutional form of blood poisoning. In addition to these we have such general and predisposing causes as heredity, cold, damp occupations, especially those of a nature necessitating exposure to unusual heat and sudden cooling. It is well to keep in mind some of the differential points of diagnosis between interstitial and tubal nephritis. Albuminuria is often absent in the former, requiring the most delicate tests to detect it. Here we may also expect to find cardiac hypertrophy, increased arterial tension, with proneness to hemorrhages, such as epistaxis, apoplexy, etc. There are few or no casts, while in the tubal form they are plentiful, and the urine loaded down with sediment.

The elimination of urea is greatly diminished in Bright's disease, and an approximate return to the normal distillation of urea is an encouraging symptom.

After chronic Bright's disease is unmistakably developed the average physician considers death within a short time inevitable. But this is not a necessary consequence. Recoveries do take place, and the return of urea, increase in flesh, diminished arterial tension, and increased digestive capacity are all favorable symptoms.

If undigested albumen were capable of passing into the blood and of uniformly exciting nephritis, as is claimed by Dr. Gray, arguing from our present knowledge Bright's disease would be much more common than at present. The clinical fact that sweet milk is commonly used, and successfully, in its treatment, would

seem to disprove the correctness of his deductions, and it is no uncommon occurrence to even find the surgeon supplying the needs of a depleted arterial system by the injection of milk directly into the blood vessels.

Dr. W. S. Gordon wished to know if Dr. Gray intended to imply that indigestion is the sole cause of Bright's disease?

Dr. Gray replied that in the title of his paper he used the indefinite article "a" advisedly, intending thereby to indicate that he considered indigestion as one of the causes of Bright's disease.

He further said, that upon an analysis of the causes which Dr. Moore had enumerated, however diverse they might at first appear, that they were all ultimately seen to be kidney irritants, and as such, no matter what their individual nature, will, when long continued, result in albuminuria and Bright's disease.

It is not necessary for albuminoids to be digested in order to enter the circulation, and the entrance into the circulation of proteids which have not been chymified will produce nephritic irritation and Bright's disease. Cites the case of a lady from a distant city, who was suffering from an unmistakable case of interstitial nephritis—the urine loaded with bile and yielding one seventh its bulk of albumen; feet edematous; characteristic retinitis, with almost complete blindness; dyspepsia, and inability to digest animal food. Had been treated with cod-liver oil by her former physicians, in tablespoonful doses three times a day, every dose of which made her sick. The dose was gradually diminished until only one half a teaspoonful was given, but the repugnance continuing, it had finally to be stopped entirely. When she came into Dr. Gray's hands he put her upon 1 gr. of pepsine and $\frac{1}{20}$ gr. calomel after each meal, and 1 gr. of pancreatine one hour subsequently. In six weeks the casts and albumen disappeared from the urine, and she was soon well. A second case, which was not of so long standing, but was, in the main, identical with the case above, was treated similarly with a like happy result. And other cases equally significant could be mentioned in illustration of the curative value of treatment directed to the digestive system in Bright's disease, clinical facts

which the speaker thinks amply sustain him in the opinion that indigestion is a frequent cause of Bright's disease.

Mr. Hugh Blair quoted Dalton as saying that albuminoids, after being absorbed into the portal vein as peptones, are probably retransformed into albumen, which is a normal ingredient of the blood, and so is constantly present in the kidney circulation. He therefore does not look upon the presence of undigested albumen in the blood as a pathological condition or as likely to generate anatomical changes in the kidney. Albumen in the urine is the result of: (1) Changes in the epithelium of the kidney and consequent perversion of its excretory functions; (2) pathological condition of the blood permitting the escape of serum by way of the kidney; (3) alterations of vascular walls, and (4) hypertrophy of the heart or other conditions causing increased pressure in the renal veins. Albuminuria, therefore, is a result, not a cause of Bright's disease.

In answer to a question from Dr. Gordon as to what form of Bright's disease is most apt to result from the absorption of non-assimilable foods, Dr. Gray replied, Interstitial nephritis. In these cases he frequently finds oxalate of lime in the urine.

Dr. Gordon mentioned the case of a patient suffering from chronic interstitial nephritis who is a great pork eater, and thinks high living produces Bright's disease. When indigestion is present and oxalate of lime is formed, it becomes a question as to which causes the congestion of the kidney. Excessive urea, concretions of uric acid, oxalate of lime, and other crystals produce nephritic catarrh, which is the first stage of Bright's disease. Is it not reasonable to suppose that there may be almost as much of a nephritic irritant as the undigested albumen?

Dr. Landon B. Edwards next spoke upon The Emergencies of Parturition. From the moment that woman becomes wife she is continually subjected to what may be called the emergencies of married life. On the very threshold of the conjugal relation we are confronted by instances of fatal hemorrhages consequent upon rupture of the hymen and vagina. During pregnancy a series of emergencies are lia-

ble to occur, ranging from trivial to mortal. The woman pregnant is before us continually as an emergent case. The speaker will not attempt to enumerate all of the accidents incident to pregnancy, but wishes to consider the more critical emergencies requiring prompt, active, and skillful interference on the part of the physician.

There is not one of these which is more dreaded than extra-uterine pregnancy. If called to a patient supposed to be pregnant, who for several days preceding the sudden call to her has been the subject of slight discharges resembling the menses, but lasting longer than customary, and suffering from severe pain and profound shock, we may pretty safely conclude that we have a case of extra-uterine pregnancy with rupture of the tube, and the prompt use of the surgeon's knife is then required.

Rupture of the Uterus. We are progressing naturally in labor, when the woman screams out with sudden pain, succeeded by shock in proportion to the degree of the rupture; profuse perspiration; blanched face; with or without external hemorrhage. Upon abdominal palpation we find Schroeder's contraction ring a few inches below the umbilicus. If the head of the child is accessible to the forceps, at once apply and deliver, or do craniotomy if necessary. Do not attempt version, as we run the risk of enlarging the rent. If this fails, we must without delay resort to abdominal incision.

Placenta Previa. No life should be so dear to the obstetrician as that of the mother, and when we encounter a central implantation of the placenta, the quickest, surest, and best plan is to forcibly tear it from its insertion, even if the child die. There is nothing else to be done in such a desperate case with safety to the mother. It is not feasible to attempt to insinuate your hand through the placenta and turn and deliver. It is much easier and quicker to tear it away and pull the head down.

If an adherent placenta does not come away easily, get off as much as possible, and, using antiseptic washes, leave the remainder to be discharged with the lochia.

Post-partum Hemorrhage. One hour is not the limit to the liability of this accident. The

speaker has seen it three hours after delivery, and remains readily accessible to his patient for several hours, with instructions to the attendants to call him upon the slightest indication of flooding. This is sometimes indicated by swelling of the abdomen without external hemorrhage. In this form of concealed hemorrhage the indications are to cause the womb to contract by external manipulation, compression, etc. Failing in this, swab out the womb with a towel or sponge saturated in vinegar, whisky, chloroform, or any thing which may be at hand that will constrict the vessels and cause the womb to contract. Don't wait to run to the drug store for some unfailing remedy, but utilize any thing which may be at hand in this emergency.

Inversion of the Uterus is very uncommon, and is supposed to be due to a fatty degeneration of the muscular fibers of the womb. It may sometimes be replaced by continuous double pressure—one hand in the center and the other around the neck of the womb.

Puerperal Convulsions. It is important to make a proper diagnosis of the particular form of convulsion we are called upon to treat. Use chloroform and bleed in the apoplectic form; in the uremic, pilocarpine hypodermically; in the hysterical form, characterized by heavy, stertorous breathing with periods of relaxation, use morphine. Chloroform, however, may be used in all or any of these. Beware of convulsions which come on with frontal headache, and go actively at work to eliminate the poison, restricting the patient to a milk diet. Preventive treatment is frequently of the utmost importance. The doctor wishes to emphasize the necessity for different treatment in the different forms of convulsions; does not believe in empirical prescribing in these cases. Among other things referred to as emergencies were hemorrhage during labor, vaginal and perineal lacerations, dystocia requiring the use of instruments, delivery of monsters, phantom pregnancy, puerperal mania, uterine inertia, etc.

Dr. C. L. Cudlipp is reminded of a case of rupture of the womb which occurred in his practice. He was called to a patient on Saturday who had been in labor since Wednesday, being in the care of medical students. He found her

suffering considerably, but not with the characteristic intermittent labor pains; but constant pain, with distended abdomen, tympanitis, and rigid os. Called Dr. Warrener in consultation, who advised the administration of morphine. About 7 or 8 o'clock that night she was seen by Dr. Chas. S. Mills and rupture of the womb diagnosed. Assisted by Dr. Thomas J. Moore, the abdomen was opened, discovering the child a putrefying mass lying outside the womb, where it had evidently been since the Wednesday preceding, and emitting an insufferable odor. The doctor gathered from the attendants that a black liquid, presumably ergot, had been early administered by the students.

Dr. Thos. J. Moore said that it was evidently a case which had been too much hurried up. The rent in the womb was very extensive, the child lying in the abdomen in a state of decomposition. The operation was skillfully performed by Dr. Mills, but the condition of the woman was such at the time that death was an inevitable result.

The doctor then spoke of a case of puerperal convulsions which was remarkable for the exceptional continuance of unconsciousness. She started on the cars from Florida to go to New York to be delivered; was taken with violent convulsions on the train between Petersburg and Richmond, and was brought here to The Retreat for the sick. She was undergoing the eighth convulsion when first seen by the doctor, who bled her profusely, further controlling the convulsion by the use of morphine hypodermically and chloroform by inhalation, which was repeated upon the recurrence of nervousness and muscular twitchings. The child was born, and she made a rapid recovery, but remembered absolutely nothing of her trip from the time she took the cars in Florida until she awoke after the cessation of her convulsions.

Dr. W. W. Parker completed the history of the case of convulsions in a boy aged four, previously partially reported. He one day had forty-five convulsions, confined mostly to the upper extremities, with complete unconsciousness. Appetite was good all the time. He had convulsions the 18th of the month, when he was circumcised. No abatement of the fits followed the operation. Had from fifteen to twenty

seizures a day, with profuse salivation. Gave bromides and blistered back of neck in the outset; then purged freely. On the 8th of October, at the suggestion of Dr. Isaiah H. White, began the administration of the iodide of potassium and bichloride of mercury. Convulsions soon began to decrease, and had entirely ceased by the 20th of October, and since that date the child has been entirely well. The treatment, however, is continued. There must have been an average of 20 fits every 4 hours for 38 days, which gives a total of 760 convulsions in a little more than a month.

The doctor next spoke of a case of typhoid fever, the patient being a girl of fine constitution, aged twelve. He first saw her the 12th of October. She had complained of headache four days before, but continued at school two days before going to bed on the 11th. Below is a summary of the case:

October 12th: Pulse feeble; temperature 101° F. Bad expression of face. Diagnosed typhoid fever.

October 13th: Saw her early in morning; pulse very feeble; mind wandering; violent headache; skin hot; neck stiff; temperature 103.5° ; pulse 160, and very feeble; respiration not more than 30; nausea and vomiting. Ordered blister on back of head and ice cap. Saw her twice during the day.

October 14th: Little or no change, except the headache lessened after the blister drew; vomited a quantity of frothy mucus; the bowels had not moved, and gave solution of 1 gr. carbolic acid and 2 grs. of calomel. The acid stopped the vomiting for a while. Gave at night 20 grs. each of potas. bromid. and chloral by injection, which produced good sleep. Temp. 101, and pulse very weak and quick. Not having had an operation from the bowels, an enema was given with good result.

October 15th: No change for the better. Pulse 175 or 180, and very feeble; temp. 100° ; delirium deepening; blind and almost deaf; pupils slightly dilated and almost immobile.

October 16th: Vomiting continuing, and can retain nothing upon stomach. Ordered enema of milk, eggs, and brandy every four hours, which was retained; epigastrium well rubbed with mustard; she vomited the milk and lime-

water. Asked for consultation, and saw her with Dr. Creushaw.

October 17th: Temperature 99° ; pulse 160, and exceedingly feeble; respiration 39; skin cool and soft; eyes unchanged; bowels had acted twice, but actions small; had taken 6 grs. of calomel in the previous twenty-four hours, and the last movement evidenced the action of the mercury. Brain in same condition; can't understand any thing, and recognizes no one; tongue dry, with white coat. At 10 P.M. temperature was 101.5° ; skin hot; showed her tongue, and took whisky and water. R. & C.'s prepared food was added to enemas. Passed a good deal of wind; abdomen has been distended and painful, but is now softer; pulse stronger and more steady.

October 18th: Temperature 99° ; pulse 154, and weak; respiration 40. The redness made by the mustard on the epigastrium has very much deepened in color; the blister on the back of neck began to bleed; would protrude the tongue slightly when asked to do so in a very loud voice; eyes continually closed, and have been since the attack began. At 11 o'clock P.M. the pulse was 160, and very feeble; passed a good deal of gas from bowels; has not vomited at all to-day, and takes more toddy and milk; swallows very well; pupils very much contracted for the first time; on turning her on her back to examine the blister she expressed her resistance by cries; has not spoken a word for four days. Gave a tablespoonful of whisky and one of milk every hour.

October 19th: Saw patient at 11.30 A.M. Much worse; pulse 160, and very feeble; temperature 102.1° ; respiration more hurried and shallow; spent a bad night; could not swallow milk toddy; remained with her till 1 P.M., when all the symptoms got rapidly worse, and she died at 2 P.M. The temperature was never higher than 103.25° , and that was in the earlier part of the attack.

Several things were peculiar in this case: (1) The profound depression of the nervous system from the first, producing feeble heart action and consequent low temperature; (2) the fever heat did not kill her; (3) the vomiting for four days in the beginning of the attack, showing inhibited nerve power of the pneumo-

gastric, and further depressing the circulation and re-piration; (4) no diarrhea, but constipation partly due perhaps to the reversed peristalsis consequent upon vomiting; (5) the increased congestion produced by counter-irritants; (6) the redness produced by the mustard plaster upon the chest continued to deepen to the day of death, and the blister on back of head and neck refused to heal, and bled considerably the day before death; (7) the rapid termination of the case—ten days sick and only eight in bed; (8) the whole force of the attack being made upon the brain from the first; (9) the doctor called the attention of the Academy at the last meeting—the second day of the attack—to the remarkably blanched and pinched expression of mouth and nose, and predicted a rapidly fatal termination, saying she would perhaps die by Sunday, which came true.

Dr. Jacob Michaux supplemented the report of a case submitted at the last meeting, that of a child with a continued fever of high grade running a course of fifteen days, with a temperature of from 104° to 105° F., and terminating favorably, being peculiar in that there was no ascertainable cause for the high fever. He subsequently attended a case almost identical with the one before reported.

Dr. M. D. Hoge, jr., finds that camphor-phenique effectually dissolves and checks the extension of the diphtheritic membrane. It is easily applied without dilution.

JAS. N. ELLIS, M.D.,
Reporter.

LOUISVILLE SURGICAL SOCIETY.

Stated Meeting November 17, 1890, E. R. Palmer, M. D., Vice-President, in the chair.

Dr. Rodman, on behalf of the president, Dr. Yandell, who was absent, presented a specimen of bladder calculus removed by the high section three days before. Lateral perineal section was first attempted, but the stone found was so large and encysted that attempts at its removal by this method failed. The high section was then made; the peritoneum from its position was wounded, omentum protruding; the latter was cut off and returned, the serous cavity being closed. The stone was removed, and found to weigh four ounces. The patient suffered greatly from shock, but reacted and at

the time of report was doing fairly well. From the history of the case it was inferred that the nucleus was of uric acid formation, as he gave a history of renal colic ten years before.

Dr. Cartledge thought surgeons had too great a dread of breaking up large stones after the lateral operation where the size prevented their removal. In two instances he had encountered stones so large that only by free and dangerous cutting of the prostate could the delivery have been effected. He resorted to crushing the stone through the perineal wound; both cases recovered promptly, and have shown no tendency to recur after periods of five and seven years.

Dr. Vance thinks it preferable, when possible, to crush the stone after perineal section rather than resort to the double operation.

Dr. I. N. Bloom: In view of the difficulties and some danger attending the lateral operation, such as hemorrhage, delivery of the stone, etc., why not do the comparatively bloodless and easy supra-pubic section? Especially is this operation indicated in large stone and in old men. Where a healthy bladder is found suture at once. Boys bear the lateral operation much better than the middle-aged and the old.

Dr. Roberts agrees with the remarks of Dr. Bloom. Had only performed the high operation twice for stone. He discarded rectal distension by the Peterson method as dangerous and useless. Was in the habit of raising the bladder by the introduction of a staff. In operating for enlarged prostate he simply punctured the bladder (supra pubic) with a large trocar and canula. After withdrawing the trocar he carried a tube through the canula into the bladder and left it to drain.

Dr. E. R. Palmer believes the Peterson bag will be discarded on account of the cardiac syncope it often causes. The distension of the bladder prior to incision seems quite sufficient to raise the peritoneum above the danger line.

Dr. Rodman: I am aware this operation is open to some criticism. It was performed without any preparation on the part of the surgeon, the presence of a stone being first discovered when the patient was on the examination table before the class. A set of old and incomplete instruments belonging to the hospital were

used in the hurry of an operation suddenly determined upon. The encysted character of the stone was the main obstacle to its removal through the perineal wound.

The essay of the evening was read by Dr. J. M. Mathews; subject, "Some Criticisms of Whitehead's Operation for Hemorrhoids."

DISCUSSION.

Dr. A. M. Cartledge: I think we have had the pleasure of listening to the best refutation of what may with propriety be termed the Whitehead craze that it has been my fortune to hear. However, I think the essayist should have been a little less sweeping in his objections. I agree with the speaker, that in the light of our present surgical knowledge of the treatment of piles, it is difficult to see how an operation requiring the time and technique of Whitehead's will take the place of the simple, safe, speedy, and effective method of ligation. The exceptions I would make in favor of the operation are the tolerably numerous cases of internal hemorrhoids associated with a minor or greater degree of prolapse of mucous membranes, with a patulous and relaxed condition of the skin surrounding the anus. In one pronounced case of the above character I secured an admirable result after the Whitehead method.

Dr. Cecil was struck with the statistics of the ligature as given by Dr. Mathews. The method would seem as safe and effective as could be wished from any surgical procedure. It seemed probable that where primary union was not secured the Whitehead operation might produce stricture.

Dr. Rodman: The operation of Whitehead is based upon an unsound pathology. It is not necessary to excise the entire mucous membrane within the anus when it is not diseased, and I don't think it is in the majority of the cases of piles. Previous inflammations may render the dissection difficult. Hemorrhage may be a troublesome and dangerous factor. Dr. Cecil's objection as regards stricture is, I think, well founded. Dr. Mathews lays stress on the necessity of an anesthetic; still this applies to the ligature too.

Dr. Vance thinks the progress of future sur-

gery will demonstrate a means of cure of piles by a plastic operation.

Dr. Roberts: I agree with gentlemen preceding that the operation is a good one in selected cases. I have performed the operation but once. Free division should precede all operations for internal hemorrhoids. The strong nitric acid is the best agent in the capillary pile.

Dr. Mathews: Dr. Cartledge has expressed an opinion taken by most of the gentlemen. I dissent. The tumors I like best to ligate are old ones and very large. Why? If you feel the mucous membrane above these, it will be found to be smooth and healthy. In such cases I cut close to the ligature, and the subsequent healing process is quite sufficient to restore relaxed mucous membrane and skin to its normal tonicity. If I did the Whitehead in any case, it would be one of mixed internal and external, or so called marginal piles. Dr. Cecil strikes the chord when he observes the results from ligation of Allingham and others. The ligature separates in from six to eight days, the patient recovering in as short a time as by any method. As to retention of urine, if dilatation is thorough, it will be no more frequent after the ligation than by other methods. As to the use of an anesthetic, if there is no superfluous skin I operate without it.

Dr. Vance reported the case of a child with extrophy of the bladder and rectal prolapse in which he has excised four inches of the rectum, the case doing well. He purposes doing a plastic operation for the bladder condition in the near future.

A. MORGAN CARTLEDGE, M. D.,
Secretary.

Reviews and Bibliography.

The Physician's Visiting List (Lindsay & Blakiston's) for the new year 1891. Philadelphia: P. Blakiston, Son & Co.

"Strength, Compactness, Convenience, and Durability are the essential qualities which a good Visiting List should possess to resist the unusual hard wear it receives. These qualities are all combined in Lindsay & Blakiston's

Physician's Visiting List, which has now been published for forty years. It is the most convenient for the pocket, and its contents are arranged in the most advantageous way, including many useful tables and much specific information.

"Aside from its other features, its size and weight recommend it. It is the Smallest and Lightest Visiting List published; a very great advantage, when we consider the number of articles the physician has to carry in his pockets.

REGULAR EDITION.

For 25 Patients weekly.	Tucks, pockets, and pencil,	\$1 00
50	"	1 25
75	"	1 50
100	"	2 00
50	{ 2 vols. Jan.-June } "	2 50
100	{ 2 vols. Jan.-June } "	3 00
	{ 2 vols. July-Dec. }	

INTERLEAVED EDITION.

For 25 Patients weekly.	Interleaved, tucks and pencil.	\$1 25
50	"	1 50
50	{ 2 vols. Jan.-June } "	3 00
	{ 2 vols. July-Dec. }	

PERPETUAL EDITION—WITHOUT DATES.

- No. 1. Containing space for over 1,300 names with blank page opposite each Visiting List page. Bound in red leather cover, with pocket and pencil.....\$1 25
- No. 2. Containing space for 2,600 names, with blank page opposite each Visiting List page. Bound like ,
- No. 1, with pocket and pencil..... 1 50

MONTHLY EDITION—WITHOUT DATES.

- No. 1. Bound, seal leather, without flap or pencil, gilt edge. 75
- No. 2. Bound, seal leather, with tucks, pencil, etc. " 1 00

"These lists without dates can be commenced at any time and used until full, and are particularly useful to young physicians unable to estimate the number of patients they may have during the first years of practice, and to physicians in localities where epidemics occur frequently. In the monthly edition the patient's name has to be entered but once each month."

Such, as taken from the publisher's advertisement, are the essential features of this time-honored physician's companion. It is the father of all visiting lists, but, unlike other old things, renews its youth yearly. It is not easy to see how a better list could be framed.

The Medical News Visiting List for 1891. Philadelphia: Lea Brothers & Company. 1890.

"This list has been thoroughly revised and brought up to date in every respect. The text

portion (32 pages) contains the most useful data for the physician and surgeon, including an alphabetical Table of Diseases, with the most approved Remedies, and a Table of Doses, both prepared from Dr. H. A. Hare's new Text-book of Practical Therapeutics. It also contains sections on Examination of Urine, Artificial Respiration, Incompatibles, Poisons and Antidotes, Diagnostic Table of Eruptive Fevers, Ligation of Arteries, and a full descriptive list of valuable Remedies not yet in general use. The classified blanks (176 pages) are arranged to hold records of all kinds of professional work with memoranda and accounts. Four styles are now published: Weekly (dated, for 30 patients); Monthly (undated, for 120 patients per month, and good for any year); Perpetual (undated, for 30 patients weekly per year); Perpetual for 60 patients weekly per year. This last style, a novelty for the coming year, consists of 256 pages of assorted record blanks, without text. The Medical News Visiting List adapts itself to any system of keeping professional accounts. Each style is in one volume, bound in handsome red leather, with pocket, pencil, rubber, erasable tablet, and catheter scale, price, \$1.25. When desired, a Ready Reference Thumb-letter Index is furnished, which is peculiar to this Visiting List, and will save many fold its small cost (25 cents) in the economy of time effected during a year."

Having exhausted our supply of adjectives in setting forth the merits of this book in former years, we can now only say that the List for 1891 is all that any of its predecessors was, and as much more as advance in science and new facilities in book-making can make it.

The Medical Bulletin Visiting List and Physician's Call Record: Arranged upon an original and convenient monthly and weekly plan for the daily recording of professional visits. Philadelphia: F. A. Davis.

"This Visiting List is arranged upon a plan best adapted to the most convenient use of all physicians, and embraces a new feature in recording daily visits not found in any other list, consisting of *stub or half leaves in the form of inserts*, a glance at which will suffice to show that

as the first week's record of visits is completed the next week's record may be made by simply turning over the stub-leaf, without the necessity of rewriting the patients' names. This is done until the month is completed, and the physician has kept his record just as complete in every detail of *visit, charge, credit*, etc., as he could have done had he used any of the old style visiting lists, and has also *saved* himself three fourths of the time and labor formerly required in transferring names *every* week. There are no intricate rulings; every thing is easily and quickly understood; not the least amount of time can be lost in comprehending the plan, for it is acquired at a glance."

In addition to the above noted device for facilitating clerical work, the book is well supplied with such posological and therapeutical data as may serve the physician in his work. The book is issued in three styles.

NET PRICES.

- | | |
|---|--------|
| No. 1. Regular size, to accommodate 70 patients daily each month for one year, | \$1 25 |
| No. 2. Large size, to accommodate 105 patients daily each month for one year, | 1 50 |
| No. 3. In which the "Blanks for Recording visits in" are in removable sections, as described above, | 1 75 |

N. B.—The recording of visits in this list may be commenced at any time during the year.

Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

Lady Rosebery's deep interest in all hospital work was not forgotten at the meeting of the Hospital Association, which took place at St. Thomas' Hospital, and on the proposition of Sir Andrew Clark a message of sympathy was sent to Lord Rosebery. Then Mr. Henry C. Burdett read a paper on "Nurses' Food, Work, and Recreation." Summarizing the opinions he had obtained from the ladies in charge of the principal hospitals in this country, he said it was thought that the remedy for long hours would be found in the proper arrangement of the work of the nursing staff. It was generally allowed that ten hours on duty was not too long a time, and to reduce the hours below that point would have very serious disadvantages and not be calculated to promote the best interests of either the nurses, the patients, or the hospitals. On the question of food, where

there was a nursing institution attached to the house and a nurse's home, it seemed desirable that there should be a separate kitchen and cuisine for the nurses.

Liverpool has been *en fête* in honor of the opening of the new infirmary by the Duke of Clarence and Avondale. The Prince was received by the Mayor. His Royal Highness assured the company that it had given him the greatest pleasure to visit their magnificent city, especially to open one of the most complete and perfect institutions of its kind in the United Kingdom. The infirmary, the Prince was informed, had cost £170,000, and would be opened free of debt. The party having inspected the establishment, His Royal Highness unlocked the door leading to the main corridor with a golden key provided for the occasion. On returning, the Prince formally declared the building open, and congratulated the city on the fact that when it had been found necessary, on three occasions within the last one hundred and fifty years, to enlarge the institution, the people had provided the requisite funds with the utmost liberality.

The following method is now recommended for putting in evidence the existence of the bacillus of consumption. The patient is requested to bring a specimen of the sputa coughed up in the morning when it is free from food. It should be expectorated into a wide-mouthed bottle. For examination the bottle is tipped up on the side and some of the sputa is placed in the center of a cover glass upon which another cover glass is pressed; the two glasses are then drawn apart and passed quickly through the flame of a spirit lamp. The following staining-fluid formula has been found at the consumption hospital to be the most convenient and durable: Fuchsein, by weight, 1 part; absolute alcohol, 10 parts; solution of carbolic acid at 5 per cent, 100 parts. The cover glass, with the sputa side downward, is floated on the staining solution in a watch-glass, which is held in a wire gauze over the flame to hasten the coloring, or a few drops of the staining fluid are allowed to fall on the cover glass, which is then cautiously held high over the flame until bubbles break on the surface. The glass is then dipped into

dilute nitric acid (one of acid to three or four parts of water) until slightly decolorized, then directly into water in order to stop the decolorizing process, or it may be passed from the acid into alcohol instead of into water. For immediate examination it is laid on a slide, the excess of liquid taken up by blotting paper and passed under the microscope.

Dr. William Genimell states that he has treated forty-nine cases of whooping-cough with the new alkaloid ouabaine, the dose being, at the onset, $\frac{1}{5200}$ of a grain, which is about one half the dose that kills a frog. This had little or no effect. The dose was increased up to $\frac{1}{1000}$ of a grain every three hours, administered to a child of five years old. Under this dose, if the case were one of moderate severity, the fits of coughing and the whoop usually diminished rapidly, but in two cases, when the little patients were much prostrated, this dose was found to be too small, and it was increased. Out of the forty-nine cases twenty-five were dismissed cured, four died, and the remainder are still under observation.

At the meeting of the Pathological Society Dr. Gulliver showed an interesting specimen of a case of atrophy of the heart, its weight being $3\frac{3}{4}$ ounces; in all other respects it looked healthy. It had been removed from the emaciated body of a woman aged twenty-eight, of medium height, whose weight was 3st. 10lbs. The weights of the other organs were: Lungs, right, $11\frac{1}{4}$ ounces; left, $5\frac{1}{4}$ ounces; liver, 1lb 14 ounces; spleen, 2 ounces; kidneys, 4 ounces each; brain, 42 ounces, this organ having escaped all traces of emaciation. The patient had suffered from vomiting, diarrhea, and wasting for some months, and was in hospital for six weeks before her death. She took nourishment well, but in spite of this she gradually emaciated and sank. At the post-mortem no organic disease was detected, and death was attributed to starvation from non-assimilation. The deceased attributed her condition to want of food before her admission into the hospital.

It has occurred to an invalid correspondent to ask whether something can not be done to prevent the awful waste of patients' time that goes on in the ante chambers of the leading London medical practitioners. A pitiable pic-

ture is drawn of patients who come up from the country in the expectation of combining a day's shopping with the consultation, and who find the precious moments—or, if they are unlucky, the precious hours—ebbing away while they are turning over the leaves and thumbing volumes of *Punch*, or contemplating the features of other victims. It is to be gathered from this plaint that there are patients shabby enough to slip half crowns privately into the hands of the doctor's attendant with a view to steal an unfair advantage upon their fellow sufferers. The remedy suggested is, fixed appointments with strict instruction to the attendants never to break through the list in favor of the unpunctual.

A remarkable student has been entered at the National Art Training School, South Kensington. F. I. B. Heler is his name. He comes from Bristol. Some years ago he lost his hands by an accident, but he had an innate love of art, and, undaunted by his terrible calamity, set himself to overcome the apparently insuperable difficulties thus placed in his way. Trained in the Merchant Venturer's School at Bristol, he can now draw and paint with wonderful facility, holding the pencil and brush in his mouth. His progress heretofore is said to promise a very fairly successful future.

A determined case of suicide has just been reported of an elderly man, who, after cutting through the principal veins and arteries of both legs as well the jugular vein, severed his windpipe with a handsaw.

Oxford University, by the final vote in congregation, has rejected the statute by which it was proposed to admit women to the Bachelor of Medicine examinations. It will be remembered that in all the preliminary stages of voting there had been a small majority in favor of the statute. Professor Case, who throughout has offered the most vigorous opposition to the project, again moved its rejection. On a division the proposal was lost by a majority of four in a total of one hundred and fifty-four votes.

The external use of tannic acid is said in certain cases to have produced serious edema of the larynx with production of urticaria and great prostration.

A social club has been started, called "Old

King's Club," for past and present students of King's College Hospital, with the object of promoting friendly and mutual intercourse among old King's men. Premises have been secured in Covent Garden.

LONDON, November, 1890.

OUR LETTER FROM GERMANY.

The *Frankfurter Zeitung* contains to-day (November 10, 1890) the following, which is as much as can be found out at the present time: One of the few co-laborers of Professor Koch in his tuberculosis investigations, Dr. Libbertz, of Frankfort, to-day made a few physicians acquainted with a case treated by Koch's method. Professor Koch's publication, which is everywhere looked forward to with a tension of interest, will follow now very shortly. The lymph material made by Professor Koch and his co-laborers will be made known to the assembled doctors without delay. The price of a bottle with twenty to thirty injections will be twenty-five marks (\$6.25). The success of the treatment in cases of tuberculous disease of the skin, joints, and bones, as well as recent cases of tuberculosis of the lungs, is absolutely certain. As to how far the disease can be advanced in the lungs and yet be successfully treated remains to be learned from a longer use of the medicine. The Koch method is of great value as a means of diagnosis. The injected material kills only the tubercle bacillus. In Professor Bergman's clinic a few cases of syphilis were treated, together with a great number of tuberculosis. While the tuberculous patients showed the most delightful healing power of the agent, the others were unchanged, showing not even a febrile reaction from the use of the remedy. The remedy itself is most probably one of the products of the life and growth of the tubercle bacillus. Whatever may be the nature of the remedy employed by Koch, the success of its working is certain and positive. In professional circles in Berlin a case was made known eight days ago which showed this.

Through the discovery of the tubercle bacillus the nature of a number of diseases was determined, which before had been considered

diseases of an entirely different sort. This is true of the joint and bone diseases, the "scrofula" of the lymph glands, and of that peculiar disease of the skin and mucous membrane, especially of the nose, known as lupus. This disease belongs to those wearying diseases, to cure which all remedies have been tried. By deep and broad scraping and by use of galvanocautery, which treatment lasts for several months, a tolerably satisfactory result can be attained. But the scars remain to disfigure and distort the face. Such a case of lupus of the face Koch has healed in five days by means of his anti-tuberculous injection, so that not a knot or a scar was left behind. If in the future Koch's treatment could be used for nothing more than this treatment of this horrid disease he would still deserve, on this account, to be named a benefactor of mankind. It is not so easy to recognize the success of the treatment in tuberculosis of the lungs. In the former cases the eye can follow the course of the disease and verify the cure. In the latter the diagnosis and verifications are more complicated. Is the body permanently protected from tuberculosis? To answer this requires a longer observation.

It is, nevertheless, reported that tuberculosis of the lungs can be healed after a rapid fashion by the Koch treatment. The tuberculosis of bones will never more in the future come under the knife of the surgeon. So will Koch in surgery make a most signal triumph. He will heal bones without cutting them away, and joints with a retention of their function. In the future fewer men will be compelled to go around as cripples, and seldom will we see a hunchback.

The world has in Robert Koch to honor an investigator who has first understood how to cure tuberculosis. A still wider prospective opens before us, and Koch indicated this in his paper read before the Tenth International Medical Congress. The life history, the whole biology of the causes of other diseases, of cholera, of typhoid, of diphtheria, resembles so closely that of the tubercle bacillus that it is not too much to hope and expect that in the course of time the remedies against them will also be discovered.

The latest news is that Professor Koch on the 26th inst. will make known his discovery to an assembly of physicians in Berlin. He puts it off till that date in order that a number of American representatives may be present.

In Professor Trendelenburg's clinic I recently saw a beautiful amputation at the knee-joint, after the manner proposed by Pirogoff. The amputation was performed on account of an immense sarcoma of the leg. The first incision was made from the inner to the outer condyle of the femur, and extending as far down as the tuberosity of the tibia. The second incision was through the popliteal space, joining the angles of the first incision. The front flap was then dissected up, the patella being left in the flap. The end of the femur was sawed through and the patella made to present a fresh surface by having its cartilaginous surface sawed away. This freshened surface was then brought in apposition with the end of the femur and retained in place by a catgut suture taken through both bones by means of a drill. The completion of the operation was after the usual fashion. The line of suture of the front flap with the back is well up behind, and this, together with the presentation of the patella on the end of the femur, renders the stump much less sensitive. For anal fissure Professor Trendelenburg simply incises through the fissure down to the sphincter ani. The incision of the sphincter ani or its divulsion is unnecessary. He has never seen the treatment fail.

JAMES B. BULLITT, M. D.

BONN, GERMANY.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

DR. KOCH'S CURE FOR CONSUMPTION.—A gentleman who has recently had an interview with Dr. Koch on his discovery for the cure of consumption says that metallic salts are used in the preparation of the lymph. The lymph, having isolated the bacillus, acts as a means of re-establishing the patient's health by its inherent healing powers, and fortifies him against further invasions of the microbe. The lymph has been obtained by a long and extremely difficult process, involving great expense, and

will therefore be available only for the wealthy unless the remedy be bought by the governments of the different countries for the general benefit. Dr. Koch does not expect that long-standing cases of consumption of the lungs can be cured, as in such cases other parasites besides the bacillus of tuberculosis cut their way into the lungs, while the lymph only kills the bacillus proper. This, however, is killed immediately, stopping without question the progress of the consumption. The well-known Professor Leyden, who is the only person in Dr. Koch's confidence, has the greatest faith in the discovery. He says Dr. Koch would have remained silent if he were not assured of success. He will first publicly make known the nature and effect of his discovery by an illustrated lecture, which he will deliver before the Medical Society in about six weeks.

Professor Koch will probably ere long exchange his chair at the Berlin University for a professorship devoted entirely to the study of bacteriology. He will thus be enabled to carry out his desire to apply himself wholly to the study of zymotic and infectious diseases, including not only cholera and tuberculosis, but also typhus, anthrax, diphtheria, and similar affections.

Dr. Liebreich, the eminent professor of therapeutics in the University of Berlin, in opening his winter course of lectures yesterday, dwelt on the enormous importance of Professor Koch's investigations. He pointed out that in all remedies for disease there are two equally important groups, viz., those dealing with causes and those dealing with symptoms. The most interesting thing about Dr. Koch's discovery, he said, was the fact that the process of cure he proposes is founded on a knowledge of the nature of the tubercle bacillus, that is, of the cause of tuberculosis. Dr. Liebreich hopes that the further application of Dr. Koch's method will greatly facilitate the effective treatment of infectious maladies of all kinds.

Numbers of persons suffering from consumption have already applied to Dr. Koch with a view to having his method of cure tried upon them, but the reply they have received is that the treatment can not at present be carried out except at Berlin, privately, and not in hospitals.

Professor Schrötter, of Vienna University, claims to have discovered, quite independently of Dr. Koch, a cure for tuberculosis. He has engaged to give a detailed explanation of his remedy next Friday at the meeting of the Vienna Society of Physicians. The preparations he employs in curing the disease are said to consist of compounds of prussic acid.

PARIS, November, 1890.

A. M. G.

Abstracts and Selections.

THE SURGICAL TREATMENT OF ACUTE INTESTINAL OBSTRUCTION.—Surgeons have now for some years been pleading for permission to have the sole control of cases of acute obstruction of the bowels; for they argue, and rightly, that to surgery alone can we look for cure. Surgery, they urge, ought to be the first resource and not the last. As a last resource, however, it still too often unfortunately remains, and nothing that surgeons can say seems likely to remove it from this position. Our subject for operation is probably in a pitiable plight. His vital powers, sufficiently tried by his disease, are further depressed by opium; his intestines, already in turmoil and laden with secretion, are further worried by purgatives. His weary stomach, that has been for days patiently pouring up fluids and gases from the bowels, has in addition to return stuffs that we pour into it through the gullet. The poor body, equally harassed by disease and by treatment, is then handed over to the surgeon. For what? I had almost said for slaughter. For such an operation the surgeon puts together his instruments with a heavy heart, for he knows that the resources at his command are not often successful on the dying.

But we are not here to lament over lives lost through time wasted and drugs administered, nor must we linger to urge the vital importance of early operation. Our special purpose in this discussion is to find out the best we can do by way of operation for all cases, good and bad. And if a result of our deliberation be to add to the saving of human life, it will be chiefly by a rescue of the bad cases at present usually lost. At all events, it will be mainly in this direction that I shall seek to guide your attention.

Acute obstruction of the bowels is a very complicated disease. It is composed of many important elements, only one of which is mechanical constriction of the bowel. All these elements we must regard in our summa-

tion of the clinical conditions, and by them we must be guided in our selection of measures for relief. In the aggregate we may speak of these conditions as the general state of the patient and his capacity to bear operation, and the special state of the intestinal tract and its power of self-recuperation. We must temper our operation to the tolerance of our patient, and we must leave the abdominal organs in a condition to carry on life. To neglect either of these conditions may cause death as certainly as leaving the cause of obstruction untouched.

We may not perform grave operations on collapsed patients, but we may sometimes, by successive small operations, coax them round to safety first and health afterward. Our prime motive is to save human life, and to this every thing must give way; even the set rules of a finished operation must be sacrificed. We are not extracting a cataract or a calculus, nor are we performing an amputation according to the method of a Syme or a Teale. The principles of the dissecting-room and the operating class must here be ignored. We want physiological surgery rather than anatomical surgery. It is true that anatomical knowledge and surgical experience and technical skill are indispensable, but of equal importance I would regard the cultured clinical insight of the trained medical man, and the elaborated knowledge of the true physiologist. While the mere anatomical surgeon, rigidly adhering to the rules laid down for his guidance, completes the operation *secundum artem*, even though the latter part of it partakes rather of the character of a *post-mortem* examination than of a surgical proceeding, the medical and physiological surgeon, keeping a keen eye on the vital functions and local conditions, varies, modifies, checks, or extends his actions at every step as the indications direct, and saves his patient's life by an operation that may not be dainty, but is certainly scientific and sound.

To avoid the vagueness that follows a discussion of general principles, and to make my meaning as clear as possible, I will imagine three actual cases, and shortly describe what I believe to be the best operation in each case. In the first the patient is caught at an early stage, and in him the complete operation "of the book" is performed. In the second, a complete operation is proper, but to increase the chance of success it ought to be supplemented by proceedings intended to meet special risks. In the third complete operation is scarcely to be thought of, and the patient is tided over his immediate danger by a small operation, which is supplemented later on by another which is completely curative.

1. In the first patient the ideal operation

may be performed without elision or addition. Its purpose and end is simply the relief of the obstructing cause.

Here the obstruction will not have been of long duration, probably not more than two or three days; but there are degrees of virulence in obstruction. Extensive gangrene has occurred within three days, and little mischief has been done in a week where the causes are apparently identical. Thus the duration of obstruction, though a probable, is not a certain guide. The patient in the case before us vomits vigorously and freely, emptying the stomach at each effort; for his sensibilities have not been dulled by opium, and his strength is not exhausted. The character of the vomit need not greatly influence us. The casual presence of obstruction low down, with a bowel that has not been emptied for a day or two, may cause the vomit very early to become fecal, while in another case where there is no fecal accumulation, and where the obstruction is high up, there may be no fecal vomiting at all. It is certainly wrong to make the fact of fecal vomiting a plea for operation, and its absence a contra-indication thereto.

There is in the case before us a good deal of intestinal "worry," there are frequent waves of intestinal contraction visible, if the patient is not fat, through the parietes. His pulse is under 110, his respirations are not over 20 per minute, and he can fill his chest by a deep inspiratory effort. The abdomen is distended, but not immoderately, or so as to impede respiration. He looks frightened and anxious, but his features are not drawn and sunken. He perspires freely, but his skin is not cold and clammy to the touch. He answers questions briskly and clearly, and his mental condition is quiet, bright, and intelligent.

On auscultation there is much intermittent gurgling, most marked at a certain point which we bear in mind for future investigation. On percussion there is general resonance of varying notes, but no dullness anywhere. There is little or no tenderness on palpation, and nothing is felt by rectum or through parietes.

This then is the condition of the first patient upon whom we have to operate. We begin here, as in the other cases, by the administration of a full stimulating enema containing brandy. Anesthesia is made complete and continued throughout. The incision is made in the middle line below the umbilicus, and need rarely be longer than two inches. There are actually printed instructions still in existence which tell us that the first incision is to be long enough to admit the whole hand. I am sure I need waste no time in condemning this advice, for the authors are probably

only awaiting calls for new editions to have the opportunity of emendation. Through the opening the bowels are inspected, turned gently to one side and the other, pulled upward and downward. The piece of gut most distended with gas rises to the surface (this is not the case in distension with fluid), and often presents at the opening. Congestion here, or near here, is also greatest. A short inspection and comparison enables us to fix on the most likely coil; this we follow up in the direction of increasing congestion and distension; it will almost certainly lead to the cause of obstruction. This we deal with according to well-understood principles, and I need say nothing here about them.

The questions of dealing with volvulus by shortening the mesentery and by performing enterostomy I can not stay to discuss, although they will probably arise in most cases. In irreducible invagination the performance of intestinal anastomosis by approximation discs seems to give a chance of cure which hitherto we have been without. These and allied proceedings we hope to have put before us at this meeting by their distinguished originator, and I therefore say nothing more about them.

The relief of the obstruction is shown by a rush of gas from the distended bowel above into the empty bowel below. The purpose of the operation is thus completed, and we have only to close the parietal opening.

This is the ideally complete operation performed on a patient whose vital powers are not yet exhausted, and whose intestinal organs are not injured beyond the power of self recovery.

2. In the second case which I bring in imagination before you the patient is still well enough to bear the complete operation, but with certain precautions and additions. In this case the obstruction will probably have existed for a week or more. The patient's strength is waning, and he is no longer able to vomit up the fluids as rapidly as they are poured into the stomach from the irritated intestines. Fluid is gradually replacing gas inside the intestinal tubes, and there is some dullness in the flanks from the fluid-laden intestines which lie in the bottom of the abdominal cavity. The stomach is getting exhausted with its never ending toil, and is becoming visibly distended. The parietes are stretched to their utmost, but their muscles are now exhausted and limp, and the hard, brawny feel of the earlier stages is not so marked. Distended coils of bowel are visible or palpable through the parietes, but they contract sluggishly or at long intervals. If one or more coils remain permanently distended and of the same dimensions, we may suspect fixation by recent adhesions; and if by percussion of such coils

we get a true bell note, we may conclude that the gaseous globe is surrounded by or resting upon fluid or fluid-laden bowel. Loud rushing sounds as of currents of fluid may be heard through the stethoscope.

The patient has drawn and pinched features, and his skin is beginning to feel cold and clammy. The pulse is 120 or over, and is small and wiry; his respirations are quick, shallow, and occasionally sighing or gasping. Now and again, overpowered with nausea, he makes an effort and vomits up a little gas and fluid, but much more remains behind. His mind is perfectly clear, but he is too utterly ill and weary to pay much attention to questions.

In this case anesthesia is full of risk. For, first, the anesthetic increases shock where such increase can ill be borne; and, secondly, it has a special risk of its own as tending to induce vomiting, which may suffocate the patient. The distended stomach should be emptied by passing the stomach-tube before anesthesia is begun, or at least before it is complete. And anesthesia should be continued no longer than is necessary to make the parietal incision and place the sutures ready for tying—that is to say, from three to five minutes. All further manipulations may be carried out without pain to the patient and while he is recovering from the anesthetic. It is wonderful how little these patients feel and how quietly they will lie and languidly watch the proceedings being carried out for their salvation.

The cause of obstruction is found and relieved in the ordinary way. In this case, however, the intestine nearest to the seat of obstruction will probably be distended with fluid and not with gas; this means that it will have sunk down in the cavity below any air-containing bowel that may lie on the surface under the opening. But, although the direct cause of obstruction has been removed, the intestinal contents do not pass on, or only a little passes. There are two reasons for this, a physiological and a mechanical one. In the first place, the overdistended bowel is helplessly paralyzed and powerless to contract on its contents. In the second place, there is mechanical obstruction from the distended bowel being kinked at its numerous acute flexures. In fact, there is an obstruction still present which is clinically as fatal as if the bowel were still nipped. To relieve this obstruction, and at the same time to remove the numerous other evil effects of a distended abdomen, I would perform intestinal evacuation and drainage.

To do this effectually I would recommend that the surgeon sit down by the side of the patient and spend an hour or two there doing

it. As part of the operation I have successfully incised the bowel, evacuated its contents, sutured the wound in it, and returned it. But the bowel empties itself slowly, and to do this during anesthesia greatly increases collapse. In this case anesthesia is continued only during the very few minutes necessary for making the incision and inserting the sutures ready for tying. The relief of the obstruction and intestinal drainage—proceedings that are almost painless—may be carried out while the patient is recovering from the anesthetic or completely sensible.

The patient is completely enveloped in warm blankets, the area of operation only being exposed. A distended but not inflamed piece of bowel is brought to the surface, and at the four corners of an area about an inch square four quill-sutures penetrating the serous and muscular coats are inserted. These are tied two on each side to pieces of adhesive plaster carried around the back and fixed on the abdomen. Fixation in this way is more likely to secure steady apposition of gut to parietes than the hands of an assistant. A simple antiseptic ointment is smeared over the flaps where bowel and parietal incision meet; this will prevent the entrance of any escaping fluid into the abdomen. The intestine, its outer coats being incised by a scalpel, is now gently pierced by a large needle—by preference in connection with a large aspirating receiver; but a long piece of tubing attached to the needle to carry the fluid to a distance will serve quite well. At first there is a free rush of fluid, and perhaps gas, with rapid collapse of the neighboring bowel; then there is a check to the flow, when it merely dribbles or quite stops for a few minutes; but more fluid soon comes down, and so on the flow goes intermittently till after an hour or less the abdomen is almost flat. There is no difficulty in preventing escape of fluids into the cavity; from beginning to end scarcely a drop may escape by the side of the needle.

When we are satisfied that evacuation has been carried out to a sufficient extent, the needle is removed, the small opening in the bowel is carefully closed by a continuous stitch, the intestine is thoroughly cleansed and returned, and the sutures in the parietal opening are tied. The operation is thus concluded with a flat abdomen, the stomach having been presumably emptied and the intestines drained. What this means to any one experienced in abdominal surgery requires only to be mentioned to be appreciated. If we are not satisfied with the amount of evacuation, then a piece of tubing of small caliber is placed in the needle opening and left there for a day

or two. For this purpose the simple fixation described is, as I have proved more than once, quite sufficient. It is quite unnecessary to suture bowel to skin. In this case I am supposing that the obstruction is relieved; if it is not relieved, the drainage may be carried on for weeks till the patient gains strength enough to bear a complete operation. Such operation is much easier with collapsed than with distended bowels.

I think it is wiser at once to perform enterostomy than to spend much time groping about for the cause of obstruction. The fact that enterostomy or intestinal drainage will, even if the cause of obstruction has not been touched, rescue a patient from death, is sufficiently well established to want no emphasizing from me.

3. In the third case the condition is almost hopeless. If there is a slight chance of saving the patient's life anesthesia would almost certainly do away with this chance; also any operation at all severe would certainly be fatal. For this patient I would carry out simple intestinal drainage, with whatever help local anesthesia can give. General anesthesia I should not employ, and unless the cause of obstruction lay quite handy to the forefinger I should ignore it. A very short incision is made, not longer than an inch, and no sutures are required. The bowel is caught and held by four quilt sutures, fixed to strapping in the way already described, and the surgeon sits down by the patient to carry out the necessary proceedings for intestinal evacuation. If such a patient by these means, and the help of liberal stimulation by the rectum, can be tided over forty eight hours, his life would probably be saved.

And now I have done. I have endeavored, as shortly and clearly as I can, to put before you a few of the lessons which a somewhat extensive experience of the operation has taught me; and this experience, often as bitter as it has been always impressive, has made me believe that surely in all the domain of surgery there is no operation which makes such calls on the surgeon for real knowledge, quick decision, and cool caution. This quality of caution might indeed be put first. I do not mean that too common variety, which is half cowardice, half ignorance, but that rarer variety which combines, with rapidity of thought and action, restraint of excess; and this restraint requires courage, the trying sort of courage which tells us when to hold our hands. This is what I have been pleading for: a fuller regard to the teachings of nature, and a less rigid adherence to set rules of operation; less of surgery and of coercion, more of physiology and of adapta-

tion; in one word, a complete submission of any and every mode of operation to the simple end of saving life.—*A. G. Smith, British Medical Journal.*

MOSQUERA'S FOOD PRODUCTS—BEEF MEAL, BEEF CACAO.—Parke, Davis & Co., whose reputation for original work has long been established, announce that after thorough study of the various food products they can now supply preparations which will fulfill all the requirements for therapeutic and dietetic use.

Physicians, in their practice, very frequently meet with cases where nutrition is of more importance than medication; in fact, cases where nutrition is the only agent they can count upon. The question of replacing the waste of tissue, where normal nutrition is inefficient, by means of concentrated or predigested foods, is one that always presents many difficulties, there being very few preparations, if any, that meet all the requirements of the medical profession.

Heretofore medical practitioners have had at their disposal a great variety of preparations of meat. These are divisible into four great classes. We have, in the first place, the extracts of meat prepared after the formula of Liebig; then, the so-called meat juices; next, the ordinary powdered meats; and, finally, the meat peptones.

The ordinary process of preparing meat extracts involves a simple extraction of meat with either warm or cold water, and an evaporation of the resulting solution continued until reduced to a thick liquid or paste. This extract contains the inorganic soluble salts of the meat and some stimulating organic matter, but none of the nourishing, flesh-forming albuminous substance.

The meat juices are merely cold extractions of the meat, and such products contain some soluble albumen, which coagulates out upon boiling, and naturally can not amount to much more than four or five per cent. The meat juices, therefore, possess but little nutritive value.

Powdered meats, as heretofore known, are nothing more nor less than the residue left after extracting all the soluble constituents. Dujardin Beaumetz and several therapeutists, as a result of a careful line of experiments, concluded that this powder possessed a high nutritive value, and could be employed to advantage in the treatment of certain diseases (consumption and dyspepsia especially). That they are concentrated nutrients is a fact, for beef, in its natural condition, contains seventy-five per cent of moisture, all of which is driven off in the preparation of the powder. The fact, however, that these powders are liable to be-

come rancid, or else have been deprived of the inorganic salts peculiar to meat in its natural state, which salts are quite essential in the digestive process, is an objection to the meat in this form. Moreover, powdered beef requires just as much effort on the part of the stomach to digest it as does ordinary beef, and for this reason can not be regarded as a proper food for patients suffering with derangement or weakness of the digestive organs.

Another group of meat preparations embraces the meat peptones.

Peptone is the ultimate product of digestion, and the form in which the albuminous or proteid matter is assimilated by the system. These peptones are invariably the product of the artificial digestion of meat by animal pepsin and hydrochloric acid, or, although to a smaller extent, by the digestive ferment of the carica papaya. These are the only preparations really valuable as nutrients. But the physician meets here with another difficulty, in many cases insurmountable; the taste of the peptones is more or less bitter and objectionable to the palate, so that patients either absolutely refuse to take them, or take them only with the greatest repugnance. Besides this, their price is comparatively so high that frequently the physician is obliged to abstain from prescribing them.

All the difficulties heretofore encountered by the medical profession in the use of predigested foods have been overcome by the new food products of the Mosquera-Julia Food Company.

Mosquera's Beef Meal contains all the stimulating principles of the extracts of meat, and in addition the nutritive principles which the extracts lack; all the albumen of meat juices without their weakness; all the strength of powdered meats without their rancidity and insolubility; all the peptone of the peptonized meats without their bitterness.

The claims we make on behalf of Mosquera's Beef Meal, therefore, can not be overestimated; they are based on its analysis and properties, and may be condensed as follows:

Mosquera's Beef Meal is a perfectly pure predigested meat, containing all the nutritious constituents of good lean beef, half of which are in soluble form, ready for immediate assimilation, and the other half easily digestible by the gastric and pancreatic juices. Therefore the entire preparation, being practically dry, is composed of nutritive matter containing about forty per cent of soluble peptone and albumose.

It represents, in actual nutritive value, at least six times its weight of good lean beef.

It is perfectly palatable, and will be tolerated with ease by the most delicate stomach.

It admits of being administered in a variety

of forms, thus avoiding monotony in the food. It is the most nutritious, as well as the most economical concentrated food.

It must be understood that Mosquera's Beef Meal is not a ready prepared dish, but rather a raw product. It is nothing more than a concentrated beef, converted by artificial digestion into a form which renders it assimilable upon mere contact with the mucous membranes of the alimentary canal. It therefore must be treated by the nurse or cook with the same regard to flavor and taste they would exhibit in the preparation of beef steak. Ordinary beef, if simply boiled in water, would neither yield a palatable bouillon nor be eaten itself; salt and other condiments must be added to it. So also, in the use of this beef meal, ingenuity has necessarily to be exercised in its preparation. No matter how palatable or nutritious a food may be, unless presented in a variety of forms it will inevitably become monotonous and even repulsive, this being especially true with patients whose digestive organs are in a weak and debilitated condition. If, therefore, a patient is to take the beef meal for a length of time, it must be administered in a variety of forms to insure the benefit of all its nutrititious value.

It may be given in different soups, conditioned to suit the taste of the patient, as also mixed with biscuit powder or oatmeal porridge and milk and sugar. Again, it may be mixed with chocolate, which makes a delicious beverage, or given in the form of a sandwich, and finally as a plain beef tea, simply dissolving it in hot water, adding salt.

Mosquera's Beef Cacao consists of equal parts of beef meal, sugar, and a superior article of Dutch cacao. It does not require cooking, but may be mixed with warm milk exactly like ordinary chocolate, and so completely is the taste of the beef disguised that it can not be detected. Requiring, therefore, no previous preparation it is most conveniently administered.

To physicians interested a pamphlet, fully descriptive of the special advantages, uses, and methods of administration of these preparations, will be mailed on request, and samples will be sent to physicians who desire to clinically test them in practice.

TUBERCULOSIS AND PSEUDO-TUBERCULOSIS. Tuberculosis has been a scourge of the human race for centuries. As physical diagnosis was practically unknown until the time of Laënnec, and even pathological anatomy had not begun to be studied until toward the close of the sixteenth century, it is easy to see how many wasting diseases, being judged by their symptoms only, were confounded with tuber-

culosis. But even after pathological anatomy became a general study, much confusion existed as to what constituted tubercle and what did not. At one time, and that as late as the first half of the present century, some held that granulations were the only true tubercles, while others maintained that caseous masses were the true type, and that miliary tuberculosis was a special disease; and still others that they were all different manifestations of the same disease.

G. H. Roger, in the *Gazette Hebdomadaire*, November 8, 1890, gives an excellent review of the past and present views of tuberculosis and its pathology, about which we have admittedly learned much, but have certainly much more to learn. He points out that the anatomical arrangement believed to be characteristic of tubercle—that is, three concentric zones; in the center a giant cell, around it epithelioid cells, and surrounding all, and forming the periphery, a ring of embryonal elements—is met with in other diseases, especially in syphilitic products, and has been seen to follow the introduction into the organism of animal parasites and inert foreign bodies. This arrangement, therefore, indicates nothing in itself; it is only the reaction of the organism in the presence of a pathogenic agent. Histology availed nothing to distinguish true tubercle from false, because it was not a question of structure; but when Villemin, in 1866, showed that tubercle was inoculable, and that by inoculation tuberculosis could be transmitted, the discovery afforded the desired means of differential tuberculosis. It was found that true tubercle when inoculated produced a similar lesion in the second animal, and that the disease by successive inoculations could be transmitted to a third animal, and from the third to a fourth, and so on for a series; whereas false tubercle could at most produce in an animal only a nodule from irritation, from which nothing further could be obtained. The macroscopic and even microscopic appearances of the two tubercles were the same, but one had infective properties and the other had not.

Another form of pseudo-tubercle is produced by various worms, which have been described by Leuckart, Koch, and Laulaizé. These produce by irritation a tubercle, but it is not infective. Such a tubercle, produced by the eggs of a distoma, has been found in a man who died of beri-beri.

When Koch, in 1882, described the tubercle bacillus, the specific character of tuberculosis became, in Roger's opinion, incontestable. At once the unity of the various tubercular manifestations—certain pleuritis, cold abscesses, white swellings and Potts' disease—seemed

assured. Very soon, however, Malassez and Vignal described a tuberculosis due to another parasite than that of Koch. By inoculating a cutaneous tubercle, these experimenters demonstrated a disease transmissible in series, and seemingly produced by a mass of zoöglea. Their results have been confirmed by other observers. Subsequently, Roger published, in company with Charrin, a note of a case of tuberculosis which arose spontaneously in a guinea-pig. The parasite-producing it was cultivated, and pure cultures reproduced the disease in the rabbit, guinea-pig, and at times in a white mouse. The bacillus was different from that of Koch's; it produced granulations without degeneration, and the nodules stained differently from those of the zoögleic tuberculosis. Other forms of tuberculosis have been described by Courmont, Pflüg, Nocard, and Eppinger.

The tuberculosis produced by pathogenic agents other than the bacillus of Koch are by Roger united under the name pseudo-tuberculosis. From this it would appear that tubercle can no longer be regarded as the specific product of the tubercle bacillus of Koch, but it seems to be a reaction of the organism which can be excited by very diverse agents. It should not be forgotten, however, that, with the exception of the disease produced by Malassez and Vignal by the inoculation of a human cutaneous tubercle, the pseudo-tuberculosis of microbial origin are observed only in animals. It is for the pathology of the future to determine the relation that exists between tuberculosis in animals and that in man; in the meantime we have at least learned that mere anatomical structure indicates nothing as regards the cause of the tubercle, and that there are different kinds even of infective tubercle, due either to different causes altogether or to different species of the same cause.—*Medical and Surgical Reporter*.

HEAD INJURY, WITH HEMORRHAGE FROM THE EAR AND PARALYSIS OF THE FACIAL AND AUDITORY NERVES.—J. S., aged sixty, a laboring man, states that he has always had good health, except that he has sometimes had attacks of giddiness with dimness of vision, which passed off quickly; no headaches, and does not get up frequently at night to make water; urine good.

On June 21st he states that one of these attacks of giddiness came on, and that he lost consciousness and fell, striking his head against a curbstone. There was a V-shaped cut over the occipital prominence, which bled freely; the bone did not seem injured; there was also profuse hemorrhage from the left ear. He

seemed to me at the time to be decidedly drunk, but he strongly denied this afterward. He could be roused. The pupils contracted to light, and he could move all his limbs freely. I stitched the wound and plugged the ear.

I did not see him for two days. Then all bleeding had ceased. He said he remembered nothing of the fall nor my visit until he had been told about it. I found a diagonal rent in the membrana tympani, in front of the malleus. There was complete paralysis of the left side of the face, most marked in the lower portion. The eye could not be shut nor could he wink, but the frontalis acted slightly in frowning and wrinkling the forehead. He could neither whistle nor show his teeth, and the saliva ran out of the left side of the mouth. Watch only faintly heard on contact with left ear; singing tinnitus in left ear; tuning-fork on vertex heard louder in left ear, and no difference on closure of the auricle; slight lachrymation of left eye.

In September I saw him again, just three months after the injury. The facial paralysis was almost completely well, except a little lagging of the cheek in whistling. Hearing distance in left ear five inches; complains still of an occasional singing tinnitus in that ear. Rent in the membrane healed and a scar marking its position. The paralysis was evidently from hemorrhage into the internal ear and fallopian canal.

I think such cases are sufficiently rare to render this one worth being recorded.—*Fred. Tresilian, M. D., British Medical Journal.*

MANIPULATION OF THE NASAL MUCOUS MEMBRANE.—Dr. von Cederschöld has for some years employed a kind of manipulation, which he considers is of the nature of massage, in various affections of the nasal and pharyngeal mucous membrane. He first tried this kind of treatment upon himself while suffering from chronic pharyngeal catarrh following diphtheria, and since then has had opportunities of using it upon about a hundred cases in Stockholm. The instrument for the nares consists of a double spiral of silver wire about five inches in length, provided with a small wooden handle at one end and a loop or eye at the other. This loop serves to fasten one end of a strip of batiste—a material of which infants' frocks are made—which is wound round the spiral so as to cover it completely before the process is commenced. The instrument is gently introduced into the nostril and moved to and fro. For the pharynx a sponge-holder is used, carrying a pledget of cotton-wool, which, as well as the metal parts, is carefully covered over with batiste. Gentle but rapid friction movements are made with this over

the mucous membrane of the pharynx or nasopharyngeal space. Not content with manipulating these regions, Dr. von Cederschöld has actually invaded the interior of the eustachian tube. For this purpose he employs a spiral similar to that used for the nares, but much finer—fine enough, that is to say, to be introduced into the tube through an ordinary eustachian catheter.—*London Lancet.*

UNION OF FLEXOR TENDONS AT WRIST.—On July 3d a girl, aged twelve, pushed her hand through a window, and in doing so divided the ulnar artery, a branch of the radial artery, and all the flexor tendons of the thumb and fingers, a little above the wrist-joint.

Having tied both ends of the ulnar artery and the branch from the radial artery, I brought together with care the divided ends of the tendons and secured them with silk, so that the lower slightly overlapped the upper ends. A padded splint, covered with gutta percha tissue, was then put on the back of the arm and hand, a thick pad of lint was securely placed behind the metacarpal bones, the hand fixed somewhat flexed, and the skin brought together by sutures.

All the tendons united within a few days and the greater part of the wound in the skin healed by granulation, and the wound was entirely healed in about five weeks, the splint never having been once removed.

On September 1st the wound remained healed, and there was perfect use of all the tendons. The girl was able to flex her wrist, make a perfect fist, and to move each finger independently of the others as easily as in the other hand.

The only applications used were adhesive plaster and lint moistened with carbolic oil.—*John T. Hartill, British Medical Journal.*

SEXUAL PERVERSION.—Motet reported to Société de Médecine Legale (*Progrès Méd.*) the case of a young man who was arrested for attempting to cut off the hair of a young woman. In his rooms was found a quantity of hair. This individual had a marked neurotic heredity from both the father and mother. He was an intelligent and skillful mechanic. In 1886, after an attack of herpes inreostalis, he began to act queer and conceive the imperative conception to cut off women's hair. As soon as the shears touched the hair he had an erection, and the cutting was followed by an ejaculation. He was declared insane and irresponsible, and was sent to an asylum, where after a time he recovered from his peculiar propensity, and later resumed his profession.—*Journal of the American Medical Association.*

VAGINAL HYSTERECTOMY.—September 6th I removed the entire uterus at St. Bartholomew's Hospital for cancer of the cervical portion, and the patient was discharged on September 30th, never having had a bad symptom.

When I commenced the operation I had no intention of doing more than a supravaginal amputation of the cervix at the level of the internal os uteri. The disease reached so far back in the posterior lip that Douglas's pouch was opened to such an extent that, after the supravaginal amputation was effected, the fundus uteri protruded through the opening, and it occurred to me at once that the removal of the entire uterus was so simple, it would be better to proceed with it. I therefore continued the separation of the uterus from the bladder, and, applying Spencer Wells' large clamp forceps on either side, cut away the uterus with scissors. I then applied a strong ligature of silk on either side, and removed the clamps. Several pressure forceps had been applied during the earlier part of the operation, and these were left on. They were protected with iodoform gauze, a T bandage put on, and the patient sent back to bed. The whole operation occupied little more than an hour. Eight hours later the pressure forceps were removed, and the vagina douched with solution hydrarg. perchlor., 1 in 4,000. The douches were continued at intervals of about four hours, day and night, by Mr. Kanthack, the resident obstetric assistant, to whose skill, unremitting care, and attention to the patient I feel that her recovery is greatly due.—*Mr. Clement Godson, British Medical Journal.*

ECZEMA CAUSED BY PRIMULA OBCONICA.—Two cases of eczema having come under my notice, caused by a primula, I desire to bring them before the members of the Association.

A. D., head gardener to a resident in the neighborhood, came to me a year ago complaining of an eczematous condition of his hands and forearms. He told me that he was firmly persuaded that this was caused by some plant with which he had been working, but could not identify it. The appearance of the hands and forearms was that of a moist eczema, papulous and excoriated, with, over the joints of the fingers, severe cracking, such as is seen in frosting or hacking of the hands during winter. He complained of great itching of the skin, and had tried various household remedies without benefit.

D. H. succeeded the former case, in the same situation, and called on me a few weeks ago, showing a condition of the skin exactly akin to that mentioned in the case of A. D.

He also believed that it was caused by some plant, and told me that the condition was always worse after working in a certain part of the garden. He, at my request, promised to investigate the matter, and being a very shrewd man I expected to hear more of it. A few days ago he returned, and told me that he had found the offending plant to be the *primula obconica*, and had been testing it time after time in order to be quite sure. These plants require some attention during the months of July and August, and as sure as my patient handled them, he told me, his hands and arms were worse at night, and the itching intolerable. The details of treatment are of no importance, as both cases quickly recovered.—*Alan C. Sym, M. D., Ibid.*

THE ALLEGED RECRUDESCENCE OF INFLUENZA.—A statement has gone the rounds to the effect that a considerable number of cases of influenza have occurred recently in the city of London, amounting altogether to a recrudescence of the epidemic. We have made some inquiries, with the result that there seems to be only a slender foundation for the report. One leading practitioner in the city has informed us that he has only been able to hear of four cases, all in one family, which occurred between the end of August and September 20th; and another writes that he has seen a few cases in which the symptoms might be attributed to influenza.—*Ibid.*

RECENT INVESTIGATIONS UPON THE THYROID GLAND.—Since the crucial experiments of Horsely and others regarding the connection between the nervous system and that gland, numerous investigators have applied themselves to the study of the functions of this organ. Recently these articles have been abstracted in *Schmidt's Jahrbücher*. The first, from the pen of Prof. Ribbert (*Virchow's Arch.*, xxvii), deals with the regeneration of this gland after extirpation. The experiments were conducted upon dogs and rabbits, and consisted in removing small portions from one half of the thyroid body, and at different times after the operation removing that portion of the gland. The careful microscopical examination of these showed that in this, like other glands, there was a functional regeneration. New portions of the gland developed by infiltration from cells in the old alveoli that were at first small without lumen, but later enlarged, developing a cavity filled with colloid material. Small defects were filled with newly developed gland tissue; larger ones presented upon their edges new tissue, while the central portions were filled with connective tissue.

The American Practitioner and News

"NEC TENUI PENNÆ."

Vol. X. SATURDAY, DECEMBER 6, 1890. No. 12.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the EDITORS OF THE AMERICAN PRACTITIONER AND NEWS, Louisville, Ky.

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THE HYDERABAD CHLOROFORM STUDIES.

Everybody is familiar with the seemingly irrepressible controversy relative to the cause of death in chloroform poisoning. Is it failure of the heart, or the abolition of the respiratory function, or both? And in practice shall the anesthetist watch the pulse, or the respirations, or both? Clinical experience seems to have been conflicting, and among the most eminent surgeons have been found champions for one, the other, or both sides of the question. This is not strange, since in practice chloroform is frequently carelessly administered by inexperienced hands, and when a death does occur there is seldom anybody present who can be so circumstanced as to note with physiological precision all the symptoms in the case. But that there should be radical differences of opinion among eminent physiologists and therapeutists, whose studies are made upon animals in laboratories that give all needed appliances and conditions for scientific accuracy of observation, is remarkable.

When the results of the work of the Hyderabad Commission were laid before the profession it was believed that the question of the occurrence of death by syncope in chloroform

narcosis had been finally answered in the negative. The conversion of Lauder Brunton, who for so many years had ably championed the affirmative side of the controversy, gave great weight to the answer among those who pin their faith to authority in matters medical.

But it would seem that the question is not to be so easily set at rest; for however willing the lesser lights might be to rest the settlement of it with the Hyderabad Commission, some of the great luminaries think otherwise, as was evidenced by Prof. Horatio C. Wood's paper read at the recent International meeting at Berlin. Prof. Wood brings an array of clinical and laboratory evidence to bear upon the affirmative side of the question, and the controversy is thus launched anew.

Among the Richmonds in the field is Surgeon Major E. Lawrie, of India, president of the Commission. In a lecture delivered at the Afzal Hospital, and published in the London Lancet of November 28, 1890, this gentleman discounts the clinical evidence adduced by Dr. Wood, and questions the accuracy of his laboratory experiments. Without attempting an analysis of the controversy, we submit that Surgeon Lawrie makes some points not easily set aside, and which are of vital worth in practice. He says:

"His (Professor Wood's) clinical facts prove nothing whatever, except that if part of the chloroformist's attention is devoted to the pulse in chloroform administration deaths occur.

"Prof. Wood's experimental data do not prove that chloroform directly affects the heart. The cases he brings forward as instances of stoppage of the heart in animals are not supported by any evidence that the heart had stopped beating when he assumed it had because the blood pressure was low and the carotid pulse could not be felt. We must have more information regarding Prof. Wood's methods before we can accept his conclusions.

"He probably used a mercurial manometer. In our experiments the pulse was often visible on the Fick, or glycerine, long after it had disappeared on the mercurial, manometer, and the needle in the heart would beat long after the Fick tracing was reduced to a straight line.

"The clinical facts which led to the forma-

tion of the Hyderabad Chloroform Commission consist of an almost unbroken series of forty-five thousand cases of chloroform administration, extending over forty years. In these the chloroformists were guided, as to the effect of the chloroform, entirely by the respiration, and there was not a single death. In strict accordance with these clinical facts the experimental data of the Hyderabad Commission prove:

(1) That the administration of chloroform is free from risk if the breathing is perfectly regular throughout and the inhalation is stopped as soon as the animal is fully under its influence; (2) that chloroform never causes death by sudden stoppage of the heart; (3) that death from chloroform is always the result of an overdose; (4) that the danger of overdosing is enormously increased by holding the breath, struggling, asphyxia, or any thing which causes the patient or animal to take gasping inspirations; and (5) the inhibitory action of the vagus nerve, which is called into play in threatened and actual poisoning with chloroform, is a safeguard."

The author holds with Dr. Wood that alcohol, caffeine, and atropia are likely to do harm in a patient under chloroform, while digitalis may fulfill an important indication. Of the three first it is clear that they accelerate the speed of the heart-beat, and any drug which does this makes the danger greater because it hurries the chloroform into the nerve centers, where its paralyzing influence is soon felt. Digitalis, by slowing systolic action, tends to forestall this effect. Alcohol, however, does not always quicken the pulse, and in cases of depression under fear may be safely and satisfactorily given just before the chloroform.

The patient should never be asked to count when beginning to take chloroform, since speaking is expiratory and is followed by a deep, gasping breath, which may result in his getting an overdose of the drug. The administrator should be wary if the patient coughs or indulges in that prolonged singing tone not infrequently heard. This is but a long expiration, and must be followed by a deep gasp for air. The inhaler should be taken away whenever any thing unusual is noted in the respiratory act.

Watching pulse is pernicious, because it de-

tracts the attention of the chloroformist from the re-piration. It is unnecessary, because no reliable information as to the effect of chloroform can be obtained from the pulse. "If ever the administration of chloroform is pushed far enough to cause the pulse to show signs of failure of the heart, the limits of safety have been so far exceeded that a fatal result must almost inevitably ensue."

Against the statistics of Mr. Roger Williams, which show that at St. Bartholomew's and other large London hospitals, where the pulse is taken as a guide to the effect of the drug, one dies in every 1,236 cases of chloroform administration, and the admission of Dr. Dunlop, that in Glasgow, where respiration and pulse are both taken as criteria, three deaths occur yearly from the same cause, with others to the point, the author sets forth triumphantly the 45,000 Hyderabad cases without a death.

With the facts and figures of the Hyderabad Commission before us, it would seem that the truth of the teachings of Syme stands demonstrated. Chloroform never kills by syncope, but always by crippling respiration, and if the breathing is correctly read this anesthetic may be safely given in any and every case.

Notes and Queries.

TO PREVENT THE SPREAD OF DIPHTHERIA. From the *Medicinische Monatsschrift* we translate, in condensed form, the remarks of Prof. Loeffler made at the Berlin Congress:

Diphtheria does not, as cholera does, belong in any peculiar way to particular localities, but occurs widely distributed as an epidemic. Only with the certain knowledge of the hostile power comes the possibility of successfully conquering it. In such a hopeful position are we to-day as regards diphtheria. All authorities of all nations are to-day unanimous that the exciting cause of diphtheria is to be sought in the bacillus found by Klebs in 1883. Upon the basis of this knowledge we may lay down certain rules for the prevention of the disease.

Loeffler then discusses the necessity of isolating the patients, removal from the sick-room, as much as possible, of things which may harbor

the germs, the removal to a hospital of those improperly housed, and the certain disinfection of clothes, bed coverings, etc., by steam. He states that the bacilli can live in bits of mucous membrane or false membrane for from six to sixteen weeks, and upon this fact bases his rules as to the return of children to school. It is also shown that the germs retain their life much longer when moist, and that damp houses favor the spread of diphtheria.

The important question of the relation of animals to human diphtheria is reviewed, and the position positively taken that the danger of infection from animals is ruled out—one animal, the cat, being perhaps excepted.

It is not necessary that the mucous membrane be broken or diseased in order that the diphtheria bacillus may find successful lodgment, any more than disease of the stomach is necessary to cholera. The climate of a country has no recognizable effect upon the danger of the diphtheritic infection. The paper was summed up as follows:

1. The cause of diphtheria is the Klebs bacillus. This exists in the excretions of the diseased mucous membrane.

2. The bacillus is ejected with the excretions of the mucous membrane, and may be deposited upon any thing in the neighborhood of the patient.

3. The patients harbor virulent bacilli so long as the slightest trace of membrane lasts, and for some days after the latter disappears.

4. Rigid isolation so long as bacilli are present. Children should be kept from school at least four weeks.

5. The bacilli may live in pieces of membrane, in a dry state, four to five months. Hence the necessity of energetic disinfection of room, clothes, etc. Walls should be rubbed down with bread, the floor washed with 1-1,000 sublimate, admission of light, and drying. Especially dangerous are houses recently infected and kept closed for some time.

6. The bacilli grow outside the body at ordinary room temperature, 77° C. Flourish in milk.

7. Diphtheritic diseases of certain animals—pigeons, chickens, calves, pigs—are not due to the bacillus of human diphtheria. They are,

therefore, not sources of human diphtheria. The few observations to the contrary have been misinterpreted. The relation of a certain disease of cats to human diphtheria needs further investigation.

8. Lesions of the mucous membrane assist infection, but susceptible persons may sicken without such previous lesions.

9. When epidemics prevail the regular use of a mouth and throat wash is advisable. Ordinary aromatics or sublimate of 1-10,000 are good. The throats of school children should be frequently examined at such times.

10. Meteorological influence on the spread of diphtheria has not been recognized with certainty.

Prof. Roux, of Paris, confirmed the teachings of Löffler, emphasizing the value of disinfection of the mouth, excreta, and rooms.—*Dr. T. Potter, Indiana Medical Journal.*

PSEUDO-TYPHOID BACILLI IN DRINKING-WATER.—The strong tendency of current pathological teaching to ascribe all infectious diseases to the action of specific germs or their products has led to an extensive study of bacteriology. In spite of the fact that this branch of medicine is so recent, its literature is enormous already, and what is not known of course vastly exceeds what is known. The germs being microscopic, their forms and size can help but little in differentiating one from another of the same group, and hence reliance has to be placed upon the shape, size, color, and other characteristics of pure cultures growing in mass in a culture medium. It is possible to make mistakes even when these are observed, unless the person making the observations is unusually skillful. To illustrate this fact, we may refer to an article entitled "Notes on Pseudo-Typhoid Bacilli found in the Waters of the Riviera," by Dr. Cassedebat, published in the journal of the *Société de Biologie*, June 29, 1890. Cassedebat has found in the waters mentioned three bacilli which resemble very closely the true typhoid bacillus of Eberth.

He gives in detail the points of similarity between the true and false forms, and also the points of difference. As regards the latter, it appears that cultures of the typhoid bacillus in

milk give an acid reaction after four days, whereas two of the pseudo-typhoid forms give an alkaline reaction. Cultures of the bacillus of Eberth, made on a one-per-cent solution of peptone in an incubator, become very cloudy in a few hours and never present any other peculiar feature.

One of the false forms produces after the second day a fine pellicle without clouding the liquid, and a second false form both clouds it and produces a thicker pellicle on the surface.

Peptonized bouillon sowed with Eberth's bacilli, either at the temperature of incubation or at the temperature of the laboratory, are clouded more or less rapidly; while two of the false forms produce on the first day a thick pellicle, which in one case is very resisting, and breaks up into lumps in the other.

In the incubator, cultures of the false typhoid bacilli in bouillon and in milk, when stained with the colors suggested by Næggerath, give special characteristics more or less peculiar to each. These Cassedebat describes at length.

Enough has been said to justify the conclusion of Cassedebat, that when an investigator finds in water bacilli having the morphological characters of those of Eberth, when these bacilli form colonies similar to the latter, when this resemblance is continued in cultures on potato, even then he ought not to assert that they are typhoid bacilli. It is absolutely necessary before making such an assertion to cultivate each of these bacilli and to compare the results with those obtained with the bacilli of Eberth.

The second conclusion of Cassedebat is also highly important. He says: "It is impossible to give even an approximate estimate of the number of typhoid bacilli which may be contained in a quart or in a cubic centimeter of water, for example, without having subjected to the same control experiment each one of the colonies resembling those of Eberth's bacillus."

The bearing which these observations of Cassedebat have upon the asserted presence of typhoid-fever germs in drinking-water, when these assertions have been made by bacteriologists of only moderate skill and experience, or by chemists with no knowledge of bacteriology, is too clear to need further exposition. The

lesson to be learned is, first, one of modesty on the part of those who make reports upon the unwholesomeness of water supplies, and, second, one of encouragement to those who have been slow to believe all the evils that have been said to exist in water that does not look pure.—*Medical and Surgical Reporter*.

KOCH'S DISCOVERY.—The reports in regard to Koch's discovery of a method of preventing and jugulating tuberculosis are coming thick and fast. Every one is of course interested and hopeful.

The latest statements from Koch at this writing are as follows: The remedy is a brownish fluid which is injected in a highly diluted state under the skin. Prompt reaction follows where tuberculosis is present, and the tuberculous tissue—not the bacilli—is destroyed and replaced by healthy tissue. To secure this result, the injections must be made a number of times, as a rule, at intervals of some days. The process of change is best watched in lupus. The bacilli in cavities are probably not destroyed; therefore the applicability of the remedy to the direct cure of advanced cases is still uncertain, as also the permanency of the cures. Bone and joint tuberculosis is decidedly amenable to this treatment, with the same apparent limitations. Surgery probably will have to come in to remove the undestroyed remains of the disease. Since it seems to effect only tuberculous tissue, the treatment may probably be used as a means of diagnosis in uncertain cases, especially of extra-pulmonary diseases. In pulmonary cases the positive diagnosis by the bacteriological test has risen to the greatest importance, since it would be folly to apply the treatment indiscriminately upon all those who think or imagine they have consumption. The physician, therefore, who in the future neglects to see to it that his patient has the benefit of this diagnostic means, thus recklessly applying the treatment or allowing the cases to go unrecognized, will be almost criminal.

The material must be kept free from contamination, be sterilized if suspicious, and be used soon after dilution or be again sterilized.

All the other means of treatment, hygienic

and medical, will probably remain, even if this proves to be what is hoped. Therefore it must remain strictly confined to competent professional hands.

Some further investigations are necessary to settle the full value of the method, its permanence, the question of lasting immunity following its application, and we are called upon to be careful, to avoid slipshod methods, to use all means of diagnosis and treatment in our power, and to watch carefully the cases in the immediate future, using the bacteriological test of a return of the disease in doubtful cases.

These are briefly the points as put by Koch. We will do well to observe them carefully, avoid mere sensations, and apply to our conduct the maxim, *festina lente*. Watch Koch!—*Indiana Medical Journal*.

THE GRIPPE AS A CAUSE OF ABORTION AND MISCARRIAGE.—In the *Moscow Meditsinskoië Obozrenië*, No. 2, 1890, page 149, Prof. Ivan M. Lvoff, the distinguished obstetrician and gynecologist of Kazan, published a valuable paper on the subject, embodying a set of his own observations which are fully in accord with those recorded by Drs. W. H. Banks, of Mifflintown, and Clarence King, of Machias, in the *Reporter*, 1890, April 26th, page 489, and June 21st, page 720. During the last pandemic the author happened to come across ten cases of influenza in pregnant women, all of them being multiparæ; of the number, two were in the first half of pregnancy, and both aborted. One of them was seized with grippe while in the third month of pregnancy, abortion occurring on the seventh day of the disease. The other, a generally healthy woman of thirty-three, ceased to menstruate on October 7th, and fell ill with severe influenza on November 20th. On November 28th (second day of convalescence) there appeared an incessant sanguinolent vaginal discharge; on December 11th, an eight or nine weeks' ovum was expelled. The remaining eight women were in the second half of pregnancy. In two of the cases, referring to patients in the seventh and eighth month of pregnancy, miscarriage followed—in one on the fourth day of the attack, in the other on the fifth. The infants were born alive, but

very weak, and they survived only a short while. Macroscopically their placenta appeared to be normal. In all the four cases of a premature termination of pregnancy the complicating disease was of a very severe type, being accompanied with a very high fever, reaching its maximum on the third, fourth, or fifth day of the attack. In the other six cases the affection was relatively mild, the temperature attaining its highest stand in the course of the first twenty-four hours of the disease. In one of the abortion cases (that occurring during convalescence) the ovum was subjected to a careful macroscopical and microscopical examination which revealed hemorrhagic decidual endometritis, and an advanced fatty degeneration of the fetal membranes, the epithelium of the villi being especially affected. On the whole, Prof. Lvoff comes to the conclusion that severe febrile grippe shows the same unfavorable influence on the course of pregnancy as that produced by typhoid fever.—*Medical and Surgical Reporter*.

KOCH'S REMEDY FOR CONSUMPTION.—Koch's theory of the curative action of the remedy is, not that it kills the bacilli, but that it sets up in the diseased living tissue a process that ends in its necrosis; and he implies that the bacilli are cast off with the dead tissue, and that incompleteness of this part of the process may lead to reinfection, as also may failure of the dead tissue to become wholly separated from the organism.

To support all this, he gives absolutely no statistical evidence and not a single clinical history. We have only his statements, which in some respects are rather vague. We may add that so astounding are these statements—so utterly at variance with any known biological laws—that nothing but Koch's great name, and the prevalent confidence in his accuracy produced by his past successes, would lead one to consider his article at all seriously. He states positively that patients in the first stage of phthisis were freed from every symptom of disease, and might be pronounced cured; that patients with cavities not yet too highly developed improved considerably, and were almost cured; but that in very advanced cases

there was no improvement. He says that by this he is led to suppose that phthisis, in the beginning, can be cured with certainty by his remedy; but he admits that, thus far, no conclusive experience can be brought forward to prove that the cure is lasting.

In regard to his theory of the way in which the remedy acts, namely, that it destroys tubercular tissue without affecting any other structure, whether healthy or diseased, it must be said that he professes to have discovered a substance that has this extraordinary peculiarity—it is destructive to the cells concerned in the inflammation called tubercular. Possibly it may kill them directly because it is poisonous to cells engaged in the formation of tubercle, or it may kill them indirectly by producing inflammatory changes about them, or it may destroy them in some other manner. Whatever may be the way in which it acts, the statement is positive that it is an enemy of tubercular processes, not of tubercle bacilli. Indeed the bacilli in the dead tissue may again infect the organism, and probably surgical interference will be needed to remove them. No substance is known that has an effect at all comparable to what is alleged for this remedy. Vaccination, of course, is by no means analogous in its action, since a living organism is introduced which does not destroy the smallpox poison, but only renders the body proof against it, and moreover, does not, so far as we know, seek out particular cells or tissues for destruction.—*New York Medical Journal*.

THE LEPROSY QUESTION is one that will not "down," at least in England. A recent report by the Leprosy Investigation Committee shows an interesting diversity of opinion upon nearly every phase of the subject. Even the contagiousness of leprosy is held in doubt by some experts. Dr. Beaven Rake speaks with scepticism of the immortal case of Father Damien; Dr. Jonathan Hutchinson sticks to his fish-diet theory, and is treated much more kindly by his English *confreres in re* this hypothesis than one would expect, for he only illustrates obstinate adherence to what is utterly untenable. The very slight degree of the contagiousness of leprosy must be admitted by all, and

it makes the elaborate attempts at quarantine and isolation of some of the poor victims in this country seem absurd, if not actually barbarous.—*Medical Record*.

AMONG the features which medical men will find of special interest in the November number of Harper's Magazine is a poem, "The Quaker Lady," written by Dr. S. Weir Mitchell, and adorned with seventeen quaint illustrations from drawings by Howard Pyle. The reader will commend the wisdom of Dr. Mitchell in thus securing some *pyle* for his literary velvet, since good illustrations do divert attention from the threadbare condition of such effusions. We take it that a treatise on reflex neuroses of rectal origin illustrated by *the pile* would be more in keeping with the doctor's taste, education, and talent, while it would in the end secure him a bigger *pile* than such stuff as his poetic dream is made of.

FAILURE OF THE SALOL TREATMENT OF CHOLERA.—Surgeon J. H. Tull Walsh, attracted by the favorable report of Dr. Nicholson as to the good results of the treatment of cholera by salol, has tried it in a succession of 14 cases treated in the Puri Cholera Hospital; there were, however, 11 deaths out of 14 cases, giving a death-rate of 78.5 per cent. Miscellaneous treatment with stimulants and astringents gave better results. He considers that Hueppe and Lowenthal, who first recommended this drug, have only succeeded in adding one more to the number of medicines that will not cure cholera.—*British Medical Journal*.

AMERICANS are built upon the high-pressure plan. It seems that all classes are moved by the all-pervading spirit of unrest. Business and professional men and statesmen are especially prone to overwork. Brain-workers, who ought to know that over-strain inevitably brings premature decay both of body and of mind, permit greed, or pride, or ambition so to dominate sober judgment that the country and the profession suffer the loss of many of the brighter lights through the unwillingness of brilliant men to curb an unwise energy.—*Ind. Med. Journal*.

HIGH ALTITUDES IN PHTHISIS.—Apart from the extent of the disease, says the *Lancet*, certain constitutional states are contra-indications to high altitudes in phthisis. Of these the most important are the rheumatic and gouty conditions, feebleness of the circulation, bronchitis, and emphysema, and, lastly, albuminuria. We need have very little hesitation in deciding that no case presenting any of these features can be sent to Davos, St. Moritz, Wiesen, Denver, the Adirondacks, or other high-altitude station with any reasonable prospect of benefit.

"LIQUID CRYSTALS."—A very remarkable paper has appeared in a recent number of Wiedemann's *Annalen* on the subject of "Liquid Crystals." An industrious German chemist has, it appears, discovered some most curious organic liquids, drops of which, when examined in the microscope by polarized light, show definite axes of elasticity, just like crystals. That a liquid should possess an internal structure of this kind is one of the most remarkable of recent discoveries in the domain of molecular physics.—*Electrical Review*.

THE ladies have raised \$100,000 as a fund to induce the faculty of Johns Hopkins University to open their medical school to women, and the money has been paid over to the trustees. The object for which this has been contributed will not be attained until the fund has grown to half a million dollars. There is a shrewd suspicion that other medical colleges would have opened their doors to women for less money, and have given a course of instruction fully equal to that of John Hopkins.

THE New York Medical Journal, in an editorial, calls attention to the successful treatment of acute pleurisy with salicylates, and suggests the probability that acute pleurisy and acute rheumatism depend upon the same cause. The analogy between the joints and the pericardium and pleura, as pointed out by Mr. Hilton in *Rest and Pain*, is cited and enlarged upon. The Journal hopes that many observations as to the effect of salicylates upon pleurisy may be made and reported. This is a promising field for the observant physician.

A CONGRESS OF MIDWIVES.—The first Prussian Midwives' Congress was held in Berlin on September 22d and 23d. Six hundred midwives from all parts of Prussia, including the presidents of all the Prussian societies of midwives, were present. Vienna and other parts of Austria were represented. Lectures were delivered, mostly by authorities in obstetrics, and were reported with a view of publication. *Medical Record*.

RUSSIAN INSTITUTE OF BACTERIOLOGY.—It is announced that a Pasteur Institute is to be established at St. Petersburg through the generosity of Prince Peter Oklenburg. The building on Apothecary Island is nearly completed, and will be known as the Institute of Experimental Medicine. The conduct of the studies in regard to rabies and contagious diseases generally will be intrusted to specialists in bacteriology, chemistry, biology and veterinary science.—*Medical and Surgical Reporter*.

SACCHARIN GUNPOWDER.—The Druggists' Circular, October, 1890, states that experiments were then being made with a view to the substitution of saccharin for sulphur and charcoal in the manufacture of gunpowder. The resulting compound is of a yellowish color, and when burned makes a good deal of smoke, but for mining purposes is equal to the common article.

A REMARKABLE feat is recorded in the Chicago Daily News, in the way of safe-opening. The burglar cut one of his nails down until the sensitive pulp was exposed. This he pressed against the knob, and turned until he could feel the tumblers drop into their places. After an hour's experimenting the safe doors swung open, and the ingenious rascal was nabbed by waiting detectives.

RUSSIA now allows female physicians to practice in all parts of that empire. They will wear a badge of their profession, and can practice in female schools and institutions admitting women, in similar institutions of the *Zerustvog*, and are specially exempted from calls as experts to attend criminal trials.

URINE OF OPIUM EATERS.—A statement has gone the round of the medical press, to some extent, that tincture of the chloride of iron added to the urine of an opium habitué will give a blue tint, which is evidence of the presence of morphia.

Dr. Mattison, of Brooklyn, whose experience makes authoritative what he says on the subject, says that this statement is not true.—*Medical and Surgical Reporter*.

A DEATH occurred at Plymouth, England, during the administration of methylene. The lungs were found much congested, ventricles dilated, cardiac tissues soft and pale, kidneys large and congested, liver contracted. Methylene is administered in the Plymouth hospital about four hundred times annually, and it has been five years since a death under anesthesia occurred.

DR. BROWN-SEQUARD has left the consideration of the elixir question long enough to recur to his query: "Does man have two brains or one?" The scientist resolutely ignores a certain order of individuals who belong to neither of these two classes, but are regrettably common in certain sections of the country.—*Chicago News*.

THE RUSH HOSPITAL.—At a meeting of the Board of Trustees of the Rush Hospital for the Treatment of Consumption, in Philadelphia, held October 6th, the following officers were elected: Hon. William N. Ashman, President; Mr. William C. Bullitt, Vice-President; Mr. Joseph de F. Junkin, Secretary; Mr. Nathaniel E. Janney, Treasurer.

At the meeting of the Philadelphia Baptist Association, October 8th, it was resolved to appoint a committee to consult all the churches, and by circular ask for their opinion on the subject of the establishment of a Baptist Hospital; also to receive conditional pledges.

ONE of Reed & Carrick's extensive factories at Go-hen, N. Y., was destroyed by fire in September. This factory, which was devoted wholly to the production of their Soluble

Food and Lacto-Preparata, will be rebuilt three times the size of the one burned, with machinery correspondingly enlarged.

COCAINE FOR PAINFUL TEETHING.—The following prescription is taken from Merck's Bulletin, October, 1890:

Cocaine hydrochlorate.....1½ grs;
Syrup2 fl. drams;
Tincture of coveus.....20 drops.

M. Sig: To be rubbed on the gums several times a day.

THE Therapeutic Gazette says that one part of menthol, twenty parts of alcohol, and thirty parts of simple syrup relieve nausea and vomiting—sometimes even the obstinate vomiting of pregnancy—if given in teaspoonful doses every hour.

DR. CARL H. VON KLEIN, Dayton, Ohio, avers that morphia, in amount equal to that which would be administered hypodermically, will act more promptly and its effect will persist longer if snuffed into the nostrils than if administered by any other method.

LAST May a druggist of Grenoble, France, substituted naphthalin for β naphthol in a prescription. The substitution was detected, the druggist was prosecuted and convicted and sentenced to a fine of 500 francs and the imprisonment prescribed by law.

ATTRIBUTED TO THE WRONG CAUSE.—The Chicago Tribune tells of a Missionian who died from having gorged himself with veal and hard cider. He was a member of several societies, all of which passed resolutions imputing his removal to Divine Providence.

THE CHOLERA.—The epidemic of cholera in Japan is said to be declining in force. Up to the latter part of September there had been 25,723 cases and 16,463 deaths. In Spain there have been 3,658 cases and 1,874 deaths since the epidemic began.

A COMMITTEE has been appointed by the Philadelphia County Medical Society to draft a law that will restrict the practice of hypnotism to its legitimate channels.

THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."

VOL. X.
[NEW SERIES.]

LOUISVILLE, KY., DECEMBER 20, 1890.

No. 13.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Articles.

OBSERVATIONS ON THE SURGERY OF OTHERS IN RECENT WORK.*

BY H. HORACE GRANT, A. M., M. D.

Lecturer on Operative Surgery and Surgical Emergencies, Kentucky School of Medicine; Surgeon Louisville City Hospital.

These notes are a record of some details of surgical work I witnessed last month in New York. Some of these details were to me most interesting, and all were valuable, as well as often new. I refer only to salient points.

Supra-pubic Cystotomy. An operation for stone by the high method I saw done by Bryant. It was a typical Petersen operation. The rectum was distended with six ounces of water in the rubber bag through a small Nelaton catheter. Theirsch's solution was thrown into the bladder, the catheter was retained, its free end being clamped. The bladder wall soon appeared in the wound; no hemorrhage; the peritoneum was not seen; the bladder was opened with a knife; stone extracted. A Trendelenburg drain was put in, the operator sewed up the bladder wound around the tube and partly closed the skin wound and left the catheter in the bladder. The stone was not large, but prostatic obstruction prevented lithotripsy.

At the Roosevelt, McBurney did an epicystotomy on a female for persistent vesical hemorrhage. He could feel calcareous deposit on the bladder walls through the urethra. The bladder was washed out and injected with Theirsch, but most of this was forced out in straining. A transverse incision was made

parallel with and just above the arch; a sound in the bladder pushed the bladder wall, covered with a peritoneal pouch, up into the wound. The peritoneum was peeled off and the bladder opened safely. We could easily see into the cavity without a cystoscope when an assistant pressed the bladder up with two fingers in the vagina. The walls were encrusted over considerable surface with calcareous concretions, which were scraped off with the finger and scoop. There was slight hemorrhage only. A large rubber drain was passed through the visceral wound and brought out through the urethra. The bladder was partially sewed up around the tube, and the skin wound treated with a few sutures, but left open.

At his private hospital I had the fortune to assist Dr. Wyeth in an epicystotomy for enlarged middle lobe of the prostate, a distressing condition. The rectum was irritable, so the bag was not used. Nearly a pint of warm boric acid solution was put into the bladder. The usual incision was made. There was little fat about the patient. The peritoneum was seen on the bladder wall just above the pubic arch. It was carefully peeled up, the bladder secured with two threads, and opened with a knife. The tumor was crushed off by piecemeal with a curved beak clamp until the obstruction was removed. The hemorrhage was free but not troublesome. It was the intention of the operator to sear the stump with a Paqueline cautery, but an accident interfered with the working of the apparatus, and this was not done. A couple of stitches fixed the upper angle of the wound to the abdominal wall, a large drainage-tube was put in and the wound left open.

I saw, at the Roosevelt, McBurney distend the rectum and bladder of a young man who had a hard stone and severe cystitis. There was a

* Read before the Louisville Surgical Society, Dec. 8, 1890.

considerable quantity of prevesical fat. The peritoneum appeared in the wound in this instance also, but was high up and easily pushed out of the way. Both the bladder and the skin wound were closed tight about the drainage-tube and a tube put into the bladder through the perineum. For this last step McBurney used a director-like knife with a sheathable point of his own design, passing the point directly down to the groove of the staff, then sheathing the point and pushing the instrument down to the neck of the bladder, and then passing the broad director into the bladder on this guide after the withdrawal of the staff.

I was struck with the fact that in both operations in which the rectal bag was not used the peritoneum came down low on the bladder wall. No surgeon can help feeling some concern while dissecting in the prevesical fat, lest he fail to recognize the peritoneum. No matter how perfect his anatomy, the distinction is not always easily made, and an opened peritoneal cavity is the most serious complication that can beset supra-pubic cystotomy. In the two operations in which the Petersen bag was used, the peritoneum was well out of danger, and in one it was not even seen.

Appendicitis. At the New York Hospital I saw Wier operate on a subacute perityphlitic abscess, in which the history showed four recurrences of local peritonitis. The aspirating needle (very fine) was twice passed into the suspected region, the second time finding pus. The incision was made in the right semi-lunar line; the abscess was small and shut off from the cavity, though of course behind the peritoneum. The appendix was not sought for, nor was irrigation practiced, the operator fearing such a procedure might break down the adhesions and endanger the cavity. A glass drain was put in and the case dressed. The wisdom of using the exploring needle in such cases is very questionable, but has able support.

At the Roosevelt, McBurney operated on a case of general peritonitis suspected to be due to perforation of the appendix. Temperature 104°, pulse 120. The man took the anesthetic badly, and there was much delay. The incision was made as in the above case. The adhesions were extensive and stubborn. Sev-

eral discolored and septic-looking epiploiceles presented at the incision during manipulation. There was much straw-colored serum, but no actual pus. The appendix was not found after some ten minutes' search. A glass drain was put in and the wound closed. The median incision would probably have given better access to the parts in this case. Any more protracted manipulation than was made by the operator would have been sensibly out of place. The case looked almost hopeless; but I am unable to report its subsequent history, save that it seemed no worse on the next day.

I heard expressions from Stimson, McBurney, Lange, Briddon, Wyeth, and others, of a growing belief in the necessity of surgical interference without delay in symptoms of acute appendicitis attended with indications of a tumor and elevation of temperature, persisting after two or three days. The propriety of operations for subacute appendicitis, or in cases in which suppuration is not strongly suspected, is still *sub judice*.

Radical Cure. I saw McBurney do his operation for radical cure of hernia at Roosevelt Hospital. The incision was fully six inches long, well up to the internal ring; the sac was fully separated from the cord, and the margin of the internal ring, tied with strong gut as high up as could possibly be done, cut off, and the stump returned. The edges of the skin wound were then stitched with interrupted silk sutures to the fascia of the muscles on each side, leaving a raw valley of surface an inch or more deep, two or two and a half inches wide and six inches long, with the cord lying in the bottom. This valley was well packed with gauze and covered with dressing, not to be removed, unless for cause, for five to seven days.

I witnessed a modification of this operation by Wyeth. The case was one of infantile hernia in a man of thirty years. The sac was cut off at the external ring, and the lower end closed with continued gut suture; the upper end was tied tightly, separated carefully from the cord, as it is done by Macewen, up to and around the inner margin of the inner ring. Then the sac was doubled on itself by the Macewen method, and after the needle had been passed up through the ring and brought out on

the abdomen, the sac was well drawn into the cavity and fixed. The external wound was left to granulate after the McBurney method, save that Wyeth thought the stitching of the skin to the fascia unnecessary. The wound was dressed as described above.

Though I witnessed much other interesting surgery not here referred to, I have time for no more than a few other reports.

Amputation of the Breast. At the Roosevelt I witnessed an operation by McBurney that was as near ideal surgery as has ever come under my observation.

The patient was a woman about forty-five years of age, with a scirrhous of the breast in a condition of ulceration. It was excised by the old cart-wheel method, all the fascia of the pectoral muscles was cleared away, the axilla was opened freely, the costo-coracoid membrane dissected away with a pair of scissors, all the glands and fat removed from the space, the vessels laid bare, and every vestige of tissue that could have hidden disease extirpated. While there seemed few difficulties in the dissection, the skill of the operator enabled him to accomplish this very quickly. The axilla and very adjacent parts of the wound were washed out with bichloride, and approximated as far as could be done with sutures of catgut; a drain was put in the axilla and brought out through a skin wound. The remaining part of the wound was washed with a solution of 6 parts sod. chloride in 1,000 parts of water. Then, from the right thigh of the patient, which had been previously rendered aseptic, the surgeon rapidly shaved with a razor skin grafts, after the Theirsch method. The grafts were about one inch wide and six to eight inches long, very thin. They were dipped in the saline solution and applied in the order of the cutting, perpendicularly across the wound, each graft slightly overlapping the preceding as weatherboarding on a house. The entire wound was covered in this way, care being taken to keep the grafts moist with the saline solution. Over these grafts, neatly fitted into place, were put slips of rubber protective, also moistened. Over this were put dry gauze and cotton and the bandage. These dressings were not to be disturbed for fully forty-eight hours, at which time grafts

beginning to take may be assisted by re-adjustment. The cutting of the grafts requires some practice, but is very readily done, the thin tissue piling up on the razor as it is cut, and being quickly straightened out with anatomical forceps. Dr. McBurney expressed confidence in the procedure, though he had not yet very extensive experience in the operation just described.

At the New York Hospital I saw Wier amputate the breast. He carefully dissected away the costo-coracoid membrane and all tissue of the axilla exposing the vessels, and the posterior thoracic nerve, to the preservation of which he called attention. He also passed his fingers between the pectoral muscles in search of any glands possibly hidden there, insisting on the advisability of so separating the muscles and investigating the subclavicular region. The wound was closed up in this case.

I witnessed a private operation by Sims for sarcoma of the breast, in which he made no search in the axilla, nor does he do so in cancer except when such glands can be felt, claiming to get equally good results without it, on the ground that such glands bespeak general systemic infection already.

Trephining. At his private hospital I assisted Dr. Wyeth in an operation, which, though then done for the second time by him, has not been otherwise attempted in this country so far as I know, nor have I seen any published account of similar work, though notice of some such surgery by Macewen is, I think, in print.

The patient was a male, about thirty-five, with progressive paralysis of motion, and some failure of sensation, of about five weeks' duration. He had also a tumor of a sarcomatous appearance in the groin. The opinion of several neurologists was, that a tumor would be found in the neighborhood of the fissure of Rolando, on the opposite side from the paralysis. Dr. L. C. Gray was present at the operation. The patient was apathetic and fast becoming somnolent, and evidently utterly hopeless without some radical measures. The head was shaved close and Championniere's line located. Ether was kindly taken, but a small quantity being necessary. An incision was begun in front of the ear and curved to near the longi-

tudinal fissure, and brought back to a point somewhat lower down behind the ear, making a cone-shaped flap down to the bone, about three and a half inches from base to apex, with a base about three inches. This flap was not dissected up. A trephine was introduced at each angle at the base, and in two other places in the course of the incision. A rongeur forceps bit away the intervening bone in the line, and then the bone was broken across at the base line and turned down with its still adherent flap. The dura was now cut around the line of fracture with a pair of scissors and turned down without hemorrhage. Thus was exposed a brain surface about the size and shape of the metacarpal part of the palm of a small hand. No lesion appearing, the eye end of a straight Hagedorn needle was passed two inches deep into the tissue in several places, about over the exposed brain, with a view of locating the tumor. No sense of resistance was made out, however. After considering the matter it was decided that no surgical aid could be of further service. The dura was now stitched with catgut back to its place. It required strong traction to approximate the edges, and even then it was not completely done. In sewing back the dura a vein in the pia was stuck with the needle and gave some trouble; the bone was replaced and the scalp stitched back over three rubber drainage-tubes. The patient reacted well.

It is needless to say that all these operations were done under strict asepsis. Scrupulous cleanliness is observed as to the skin of the patient. At the Roosevelt the site of operation is covered many hours before with the ordinary soft soap of domestic celebrity. This macerates the epidermis and clears away, on washing, all dead epithelium. Great care is taken in all clinics to have all instruments cleaned in very hot water. Sponges are never used twice, save in operations on healthy tissue. At the New York gauze pledgets are used for sponges. In an operation opening the knee-joint, Dr. Stimson remarked that he never put his fingers into a joint when he could make an instrument do instead.

The equipment of these institutions in all the necessities, comforts, and luxuries of surgical

work lends additional charm to the beauty and variety of it to be seen in them; and while these perfections seem to give one a tinge of envy, they encourage also a strong hope and confidence in our progressing and revolutionizing mission.

LOUISVILLE.

RECOLLECTIONS OF STUDENT LIFE IN VIENNA.

BY CURRAN POPE, M. D.

Demonstrator of Microscopy and Bacteriology, Hospital College of Medicine.

Looking in retrospect through the pleasant vista of memories of Vienna, it seems to me that on every side familiar faces rise to greet me again as they did when, in the brisk and cold days of winter, I pursued my studies in the large "Allgemeine-kraunkenhaus" of this most beautiful city. The life in Vienna is most attractive to the American student, and it may not seem amiss here to tell something of how the physician, studying disease at the bedside and in the clinics, goes through his daily allotment of work. In this and other communications which will probably follow I will endeavor to describe the life a student leads.

Rising at seven and dressing rapidly before the fire built by the servant in one of those tall, heat-giving brick stoves so familiar to the eyes of the traveler who has been in Austria or Germany, and tossing on a heavy overcoat, we repair to a café, where a breakfast is served consisting of coffee, rolls, and butter. A short perusal of the papers of London, Paris, or New York, and we are ready for the work of the day. Eight o'clock finds us seated in Prof. Nothnagel's clinic room ready to hear that most eminent clinician discourse on disease.

It was fortunate for me that during my stay he took up those diseases in which I am mostly interested, viz., of the nervous system. One of the best lectures I heard him deliver was on nervous constipation, and the frequency with which this disease is met with in practice will justify my *resumé* of his lecture.

The case he presented was of a man who had been for some months in the hospital. He was suffering from spinal sclerosis, and his

constipation was consequent upon his disease. Nervous constipation may be due alike to cerebral or spinal disease or an affection of the intestinal plexuses of nerves. For many days his bowels did not move, and although there was great constipation there was no pain.

The learned professor considered ten days without an evacuation a pathological condition. Responses to nature's call should be at least once in twenty-four hours. He decried the prevalent idea of constant medicinal medication for constipation of any kind or from any cause, but especially in those pathological conditions of nervous origin. Medicines temporarily relieve it as a symptom, but our aim at all times should be the discovery and the removal of the *causæ morbi*, if possible. When it is impossible to remove its cause, it should be treated as a symptom. As a cause of functional or nutritional affections of the nervous system, it can hardly be overestimated. Among many it may cause may be mentioned melancholia of a mild type, hypochondria, and headache.

He dwelt some time and with emphasis upon the necessity of a thorough knowledge of the proper manner in which this disease should be treated. Manual massage at stool he considered one of the very best methods for obtaining an evacuation, toning and strengthening the gut. Starting at the ileo-cecal valve, make short, deep punches, traveling in the line of the colon; this to be followed by a patting of the abdomen to the very point of producing pain.

Acting in the same line are the continuous and interrupted electric currents.

An exercise as follows often gives beneficial results: Stand erect and place hands on hips, take a deep inspiration and bend far forward, return to the erect position, exhale and bend first to right and then to left sides, finally backward, inhaling and exhaling with each movement. Practice this night and morning. Practice a regular mode of life and defecate at a certain time. Before rising each morning take two glasses of cold water. Enemata and glycerine suppositories he condemned, except as palliatives. Fruits taken upon an empty stomach, honey, brown bread, and oatmeal were suggested as an anti-constipative diet.

Among the many medicines he used were the following, combined in a pill:

Podophyllin.....	0.3
Ex. aloes } āā.	3.0
Ex. rhei }	
Ex. taraxacum q. s. add. fecit pilulæ	
No. XL.	

Sig: One, night and morning (or adapted to each case).

Another mild laxative, a favorite prescription of his, is as follows:

Ex. cascara sagrada fl. }	āā.....20.0	M.
Syr. cortici aurantii.... }		

Sig: One or two teaspoonfuls, as required.

Change the treatment often, and depend as little as possible on drugs.

One can estimate the importance Prof. Nothnagel attaches to constipation when I remark that he spent two entire clinics (each of two hours) on this case, and said he considered he had not fully done justice to such a subject. In this case, as in all others, he followed his invariable habit of calling a student from the class to examine the case and make a diagnosis. He then takes up the case himself and investigates it thoroughly.

Many cases of anterior polio-myelitis or infantile spinal paralysis were exhibited by the professor in the course of his lectures, and microscopical specimens of the spinal cord, nerves, and muscles were shown under microscopes at a table near by.

In this I was reminded of the masterly lectures delivered at the Post-Graduate School of New York by Prof. Wm. A. Hammond. I could not help thinking of these two great men, each of whom possesses that rare power of getting at those salient points which are the roots of a correct diagnosis, without ever overlooking the fine points in a case. Dr. Hammond is a conspicuous figure in neurological medicine. He lectures with great force and facility, commanding the attention and unqualified admiration of his students, who hold him to be one of the greatest neurological clinicians of the century.

In the course of a lecture of two hours' duration, delivered by Prof. Nothnagel in his amphitheater at the Vienna Hospital, he referred no less than four times to the great

Hammond in terms of warmest eulogium upon the great work he had done for the advancement of scientific medicine.

Prof. Nothnagel's diction is simple, and his enunciation of German so clear that American and English students have no trouble in comprehending him. He is of medium height, his hair and full beard are an iron gray, his suit is always of a black cloth, Prince Albert coat, with low cut vest, turn down collar, and black neck tie.

LOUISVILLE.

Societies.

LOUISVILLE SURGICAL SOCIETY.

Stated Meeting December 8, 1890, Vice-President E. R. Palmer, M. D., in the chair.

Dr. H. H. Grant reported a case of stab-wound of the abdomen, and exhibited a specimen of colon showing wounds. Assisted by Dr. Geo. W. Griffiths and Dr. Pelle, he opened the abdomen and sutured the gut in the usual manner. The patient did well for five days, when, symptoms being urgent, the belly was reopened, and a wound was found open, probably a result of vomiting. The patient died in ten or twelve hours after the second operation.

Dr. A. M. Vance: This shows that even the smallest wound ought to be repaired. This fact was demonstrated to me by my observations on dogs. The speaker asked if there was much fecal extravasation when the belly was first opened.

Answer: No; very little, if any.

Dr. Grant read the essay of the evening, subject, Observations on the Surgery of Others in Recent Work. (See p. 385.)

DISCUSSION.

Dr. W. L. Rodman was surprised that Sims does not consider it necessary to the complete removal of the diseased glands in operating for cancer of the breast.

Dr. W. H. Wathen (present by invitation) said he doubted the wisdom of using the aspirator in appendicitis, as suggested by Wier. He does not understand why a woman should be subjected to the dangers of supra-pubic cystot-

omy, as done by McBurney, when the pus could be reached from below.

Dr. L. S. McMurtry (present by invitation) emphasized the points concerning the operation for appendicitis. In Wier's own work we find words condemning the procedure practiced. The cut in the median line may give some advantages, but where the bowel is agglutinated it is perhaps better to make the cut over the site of trouble. Dr. McMurtry operated on a case recently in which all the damage was done before the patient went to bed. We lose many of these cases by deferring the operation too long. He believes fecal concretions will generally be found in the appendix. The initial step in these processes is stricture, or obstruction of some kind, preventing the emptying of the appendix.

Dr. Wathen: No doubt many cases clear up without pus, but when there are recurrent attacks after the second attack laparotomy should be advised.

Dr. H. H. Grant, closing the discussion, said with reference to Sims' position concerning glands: He takes this position and defends it on the ground that systemic infections had gone too far in such cases and removal of the glands would do no good. Many of the best operators recommend a laparotomy in appendicitis when the temperature and other symptoms continue for two days. When the laity recognize the fact that surgery is a conservative procedure, then we will be able to apply our remedial operations in time to accomplish much better results than are now obtained. This is peculiarly pertinent to appendicitis.

Dr. Turner Anderson said: I have been seeing these cases now for fifteen years; none have terminated in abscess or death; no operation has been done; none have recurred. An interesting question is, how does the appendix relieve itself when the termination is recovery?

Dr. McMurtry: My observation has been the opposite of that of Dr. Anderson. 1st case—saw with Dr. J. Owens—operated, recovery; 2d case had all the evidences of appendicitis, a big tumor, and a temperature of 103°—I found one pint of pus—recovery; 3d case, a little girl, died; 4th case reported to-night.

Dr. Vance said: So far as my knowledge goes Dr. McMurtry's case is the first operated on in Louisville. I have not operated on any case of this kind; I have not seen an operation for this trouble; I have not seen a case of appendicitis that did not terminate in recovery. My first case I saw with Dr. Wilson. The patient was a girl; she recovered without operation. The second case, a gentleman passed middle age, recovered in two weeks. Third, another case in private practice, recovered. I have also seen four or five cases at the hospital—all recovered. I have yet to see one where I could conscientiously advise the opening of the belly, but where there are such evidences as shown in Dr. McMurtry's cases I would not hesitate to operate.

Dr. McMurtry: Does laparotomy add any thing to the dangers when antiseptically done under such circumstances?

Dr. Vance: No.

Dr. Rodman saw a case with Dr. Pusey some time ago. He was almost certain that pus was present. He aspirated, but did not find it. The case went on to recovery.

JNO. G. CECIL, M. D.,
Secretary, *pro tem.*

Reviews and Bibliography.

Post-Mortems: What to Look For and How to Make Them. By A. H. NEWTH, London. Edited, with numerous notes and additions, by F. W. OWEN, M. D., formerly Demonstrator of Anatomy, Detroit College of Medicine. Cloth, 12mo; post-paid, \$1.00. The Illustrated Medical Journal Co., Publishers, Detroit, Mich.

This book is replete with information that every person interested in necroscopy should have at easy command. It has not been designed to take the place of large works upon pathology by its authors, but to present, in a tabulated way, with quick side-head references, all the important conditions of an organ met with *post-mortem*, either in health or disease. To the country physician, who makes autopsies infrequently, it is especially valuable, as well as to the medical student who is occasionally in the "dead house" of the hospital. It is the only brief work of the kind now at command. The

American editor has made a great many examinations for court uses, and he has added numerous important notes to the text of the English author. Besides the ordinary conditions met with after death, there are chapters devoted to the *post-mortem* appearances seen in those poisoned, drowned, hanged, and to cases of infanticide. It will thus be of great use in these classes of "suspected deaths." Full directions are also given for exposing the organs advantageously for their complete examination. The book will be sent post-paid upon receipt of price by its publishers.

Physical Diagnosis and Practical Urinalysis. An Epitome of the Physical Signs of the Heart, Lung, Kidney, and Spleen in Health and Disease. Edited by JOHN E. CLARK, M. D., Professor of General Chemistry in the Detroit College of Medicine.

When a teacher writes a book and modestly calls himself its editor he disarms criticism. The author gives in this little book the matter that mainly constitutes the course of instruction in the department with which he is connected. As is to be expected, there is very little in it that is quite original, and no doubt its greatest value is for those who are under the author's instruction. The chapters on urinalysis and on bacteriology are quite too brief and deficient in illustrations. If, however, the students under the author's instructions go away knowing the fourth part, they are better equipped than is the custom. D. T. S.

A Manual of Modern Surgery: An Exposition of the Accepted Doctrines and Approved Operative Procedures of the Present Time. For the use of Students and Practitioners. By JOHN B. ROBERTS, A. M., M. D., of the University of Pennsylvania. With five hundred and one illustrations. 800 pp. Philadelphia: Lea Brothers & Co. 1890.

A few years ago it was an easy matter to name the best and even all the good works on surgery. Of late years, however, the great facilities for interchange of views, and especially the great stimulus given to surgery by the discovery of antiseptics, has led to the production of a great number of works on surgery, any

one of which standing alone would be enough to render its author famous.

Works of the scope of this are made up almost exclusively of accepted doctrines and approved operative procedures and are free from controversial matters. Of the volume before us this much can be said, that it is worthy to be placed in the front rank of its class. To the surgeons of this country Dr. Roberts is so well known by his numerous and able contributions to surgical literature, that for them a review of a work on surgery from his hands would be superfluous.

D. T. S.

A Compend of Human Anatomy, including Anatomy of the Viscera. By SAMUEL O. L. POTTER, M. D., of San Francisco. Fifth edition, revised and enlarged, with one hundred and seventeen wood engravings. Also an appendix containing numerous Tables, and sixteen lithographic plates of the Nerves and the Arteries. 315 pp. Philadelphia: P. Blakiston, Son & Co. 1890.

If quiz compends were never used by any but practitioners of medicine their production would be well justified. Scarcely a general practitioner is to be found who will go into any thing like a complete review of one of the large works on any subject except the practice of medicine. For anatomy it is especially important that he should have the essentials separated and condensed into a convenient form. In this volume of Dr. Potter, the desired object is as well effected as in many others before the profession.

D. T. S.

Essentials of Practice of Pharmacy. Arranged in the form of Questions and Answers. Prepared especially for Pharmaceutical Students. By LUCIUS E. SAYRE, Ph. G. 179 pp. W. B. Saunders, Philadelphia.

With this excellent little volume the whole list of subjects to be learned by students is well-nigh covered. Indeed, this is a more complete treatise on pharmacy than most medical students are expected to master, in this country at least. While it may still be held that there is no royal road to learning, certainly the attainment of valuable knowledge is wonderfully facilitated by these manuals and question compends.

The Medical Bulletin Visiting List, or Physician's Call Record. Arranged upon an original and convenient Monthly and Weekly plan for the Daily Recording of Professional Visits. New edition. Philadelphia and London: F. A. Davis, Publisher. 1891.

This visiting list, beside containing the usual emergency memoranda, has introduced the new feature of stubs for use when a case runs longer than a week, thus obviating the necessity of rewriting the name. In this way it is made light as well as full and convenient.

D. T. S.

The Physician's Companion. A Pocket Reference Book for Physicians and Students. By CLARENCE BRYCE, M. D., Editor of the Southern Clinic, Author of "Medical Advice to Young Men," etc. 153 pp. Richmond, Va.: The Southern Clinic. 1890.

The author has collected from current authorities for this little work a large amount of practical information, and besides has added no little drawn from his own personal experience. It is full of facts that every one needs to know.

Medical Communications of the Massachusetts Medical Society, Volume XV, No. 1, 1890. 256 pp. Boston: David Clapp & Son. 1890.

This volume is made up of select contributions of the Massachusetts Medical Society, many of which are of a high class of excellence. The work is got out in a very attractive style.

Transactions of the Michigan State Medical Society. Twenty-fifth Annual Meeting, held in Grand Rapids, 1890. 477 pp. Detroit: O. S. Gully, printer.

This volume is made up of the class of excellent work that is characteristic of Michigan physicians, and is full of live topics thoroughly discussed.

Essentials of the Diseases of Children, arranged in the form of Questions and Answers. Prepared especially for Students of Medicine. By WILLIAM M. POWELL, M. D. 222 pp. W. B. Saunders, Philadelphia.

This work is gotten up in the clear and attractive style that characterizes the Saunders'

series. It contains in appropriate form the gist of all the best works in the department to which it relates.

A Compend of Chemistry, Inorganic and Organic, including Urinary Analysis. By HENRY LEFFMAN, M. D., D. D. S. Third edition, revised. 1193 pp. Philadelphia: P. Blakiston, Son & Co. 1890.

In this edition the author has brought his excellent Compend up to date, satisfactorily treating of the numerous synthetic compounds that have lately been introduced into medicine.

Saunders' Pocket Medical Lexicon: Being a Dictionary of Words and Terms used in Medicine and Surgery. Collated from the highest authority and brought up to present date. By John M. Keating, M. D. (Univ. of Pa.), Fellow College of Physicians of Philadelphia, etc., and Henry Hamilton. With addenda, consisting of the etymological factors common in medical terminology, comparative tables of metric and apothecaries' weights, a list of poisons and their antidotes, and abbreviations used in prescriptions. Philadelphia: W. B. Saunders, 913 Walnut Street. 1890.

A Compend of the Human Anatomy, including the Anatomy of the Viscera. By Samuel O. L. Potter, M. A., M. D., Professor of Theory and Practice of Medicine in the Cooper Medical College of San Francisco, etc. Fifth edition, revised and enlarged. With one hundred and seventeen wood engravings; also an appendix, containing numerous tables and sixteen lithographic plates of the nerves and arteries. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1890.

Epilepsy: Its Pathology and Treatment. Being an essay to which was awarded a prize of four thousand francs by the Académie Royale De Médecine de Belgique, December 31, 1889. By Hobart Amory Hare, M. D. (Univ. of Penn.), B. Sc., Clinical Professor of the Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania, etc. Philadelphia and London: F. A. Davis, publisher. 1890.

Essentials of Minor Surgery and Bandaging, with an Appendix on Venereal Diseases. Arranged in the form of questions and answers. Prepared especially for Students of Medicine. By Edward Martin, A. M., M. D., Instructor

in Operative Surgery, University of Pennsylvania, Surgeon to the Howard Hospital, etc. Illustrated. Philadelphia: W. B. Saunders, 913 Walnut Street. 1890.

Ointments and Oleates, Especially in Diseases of the Skin. By John V. Shoemaker, A. M., M. D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia, etc. Second edition, revised and enlarged. Philadelphia and London: F. A. Davis, publisher. 1890.

A Text-book of Comparative Physiology for Students and Practitioners of Comparative (Veterinary) Medicine. By Wesley Mills, M. A., M. D., D. V. S., Professor of Physiology in the Faculty of Human Medicine and the Faculty of Comparative Medicine and Veterinary Science of McGill University, Montreal. With four hundred and seventy-six illustrations. New York: D. Appleton & Co. 1890.

Medical Diagnosis with Special Reference to Practical Medicine. A guide to the knowledge and discrimination of diseases. By J. M. Da Costa, M. D., LL. D., Professor of Practical and Clinical Medicine at the Jefferson Medical College, Philadelphia. Illustrated. Seventh edition, revised. 8vo, 995 pp. Price, \$6.00. Philadelphia: J. B. Lippincott Company. 1890.

A Practical Treatise on Impotence, Sterility, and Allied Disorders of the Male Sexual Organs. By Samuel W. Gross, A. M., M. D., LL. D., Professor of the Principles of Surgery and Clinical Surgery in the Jefferson Medical College of Philadelphia, etc. Fourth edition. Revised by F. R. Sturgis, M. D. Philadelphia: Lea Brothers & Co. 1890.

The Essentials of Medical Chemistry and Urinalysis. By Sam. E. Woody, A. M., M. D., Professor of Chemistry and Public Hygiene and Clinical Lecturer on Diseases of Children in the Kentucky School of Medicine. Third edition, revised and enlarged. Illustrated. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1890.

Essentials of Practice of Pharmacy. Arranged in the form of questions and answers. Prepared especially for pharmaceutical students. By Lucius E. Sayre, Ph. G., Professor of Pharmacy and Materia Medica of the School of Pharmacy of the University of Kansas. Philadelphia: W. B. Saunders, 913 Walnut Street. 1890.

A Manual of Auscultation and Percussion, embracing the Physical Diagnosis of Diseases of the Lungs and Heart, and of Thoracic Aneurism. By Austin Flint, M. D., LL. D., Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College, etc. Fifth edition, thoroughly revised. By J. C. Wilson, M. D., Lecturer on Physical Diagnosis in the Jefferson Medical College, etc. Illustrated with woodcuts. Philadelphia: Lea Brothers & Co. 1890.

Diseases of the Eye. By Edward Nettleship, F. R. C. S., Ophthalmic Surgeon to St. Thomas' Hospital, etc. Fourth American from the fifth English edition. With a chapter on examination for color perception. By William Thomson, M. D., Professor of Ophthalmology in the Jefferson Medical College of Philadelphia. Philadelphia: Lea Brothers & Co. 1890.

Progressive Exercises in Practical Chemistry. By Henry Leffmann, M. D., Ph. D., Professor of Chemistry in the Woman's Medical College of Pennsylvania, and William Beam, M. A., Demonstrator of Chemistry in the Pennsylvania College of Dental Surgery, etc. Illustrated. Philadelphia: P. Blakiston, Son & Co. 1012 Walnut Street. 1890.

The Examination of Urine, Chemical and Microscopical, for Clinical Purposes, arranged in the form of questions and answers. By Lawrence Wolff, M. D., Physician to the German Hospital of Philadelphia. Colored plate and numerous illustrations. Philadelphia: W. B. Saunders, 913 Walnut Street. 1890.

A Compend of Chemistry, Inorganic and Organic, including Urinary Analysis. By Henry Leffmann, M. D., D. D. S., Professor of Chemistry in the Woman's Medical College of Pennsylvania, etc. Third edition, revised. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1890.

A Treatise on the Diseases of Infancy and Childhood. By J. Lewis Smith, M. D., Clinical Professor of Diseases of Children, Bellevue Hospital Medical College, New York. Seventh edition. Thoroughly revised. With fifty-one illustrations. Philadelphia: Lea Brothers & Co. 1890.

The Patient's Record for the Use of Physicians and Nurses. Compiled by Agnes S. Brennan. New York: G. P. Putnam's Sons, 27 West Twenty-third Street. 1890.

Bacteriological Technology for Physicians. With seventy two figures in the text-book. By Dr. C. J. Salomonsen. Authorized translation from the second revised Danish edition. By William Trelease. New York: William Wood & Co. 1890.

Transactions of the American Surgical Association. Volume eight. Edited by J. Ewing Mears, M. D., Recorder of the Association. 8vo, 290 pp. Philadelphia: printed for the Association, and for sale by P. Blakiston, Son & Co. 1890.

A Manual of the Practice of Medicine. By Frederick Taylor, M. D., F. R. C. P., Physician to and Lecturer on Medicine at Guy's Hospital, etc. With illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1890.

A Dictionary of Practical Medicine, by Various Writers. Edited by James Kingston Fowler, M. A., M. D., Fellow of the Royal College of Physicians, etc. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1890.

The Medical Student's Manual of Chemistry. By R. A. Witthaus, A. M., M. D., Professor of Chemistry and Physics in the University of the City of New York, etc. Third edition. New York: William Wood & Co. 1890.

Text-book of Materia Medica for Nurses. Compiled by Lavinia L. Dock, Graduate of Bellevue Training School for Nurses. New York: G. P. Putnam's Sons, 27 West Twenty-third Street. 1890.

The Physician's All-Requisite Time- and Labor-Saving Account Book. Designed by William A. Seibert, M. D., of Easton, Pa. Philadelphia and London: F. A. Davis, publisher.

Abstracts and Selections.

DR. J. ROUSSEL'S TREATMENT OF PHTHISIS. While the Berlin papers have been seriously discussing the hopes entertained that Dr. Koch's investigations may lead to the discovery of a remedy for tuberculosis, the Parisian press has diverted its readers with descriptions of a wonderful process by which Dr. J. Roussel is said to perfume the human body with such scents as that of the jasmine, the heliotrope, etc. The hypodermic injection of the essences of these plants would give to the breath and the exhalation of the skin the sweet savor of delicate flowers. Strange to say, the Parisian gossip

and the scientific talk of the Berlin press are intimately connected one with the other. We need hardly remark that Dr. Roussel, the well-known physician who invented the instrument for the transfusion of blood, has not devoted himself to the art of perfuming beauties, professional or otherwise, of Parisian society. But he has taken up, from the very first, the principle of hypodermic injections for the treatment of a great number of diseases, and notably for phthisis. Perhaps, however, the fantastic stories related with regard to the perfuming of the body have arisen from Dr. Roussel's treatment of morphiomaniacs and inebriates of chloroform, ether, etc. To patients of this description he has suggested innocuous hypodermic injections of aromatic vegetable essences or perfumes, and has thus diverted the minds of such sufferers. But he has never advised any healthy person to practice hypodermic injections of scents or any other substance.

Dr. Roussel's theory is that all the symptoms of phthisis are the efforts of nature to throw off the microbe which is destroying the system. The suppurations, expectorations, are nature's attempts to get rid of the invading bacilli. The high temperature burns the leucomaines, etc., that circulate in the blood; the abundant night-sweats, the diarrhea, and surcharged urines are all so many modes of elimination. They are the arms which nature has given the human body to expel those animal particles which have been rendered injurious by the invading microbe. Therefore Dr. Roussel maintains that true science rests in the use of such therapeutics as will attack only the microbe, and that we ought not to try to diminish the power of those weapons which our organism employs in self-defense. Rather should we seek to increase the vitality of the subject who serves as a field of battle between human life and the life of the microbes. But remedies swallowed injure and disturb the organs of digestion and therefore weaken the patient, while they altogether fail to reach the lungs, where the microbes are located. General hygiene, constant ventilation, plenty of sunlight, and sanitary knitted woolen clothing are all strongly advocated by Dr. Roussel. When these are secured a general improvement in the condition of the patient is often noticed, and it is the good hygiene rather than the drugs given that secures such amelioration. To prove the efficacy of a drug, the improvement should take place when no alterations are made in the patient's surroundings and mode of life. This is what Dr. Roussel professed to have accomplished by conveying, through the medium of the blood direct to the lungs, antiseptics fatal to the life of the bacillus of Koch.

The method employed is simple, the practice easy, but the indications given must be very rigorously observed, otherwise unpleasant accidents may result. Eucalyptol is Dr. Roussel's favorite antiseptic, which he uses in the proportion of twenty per cent for his hypodermic injections. But if this or other medicaments are diluted in some substances very grave accidents may result. Dr. Roussel employs pure sterilized olive oil, as this is a substance not foreign to the usual nutrition of the human body. It is easily saponified and assimilated by the organism. This is effected as readily by the capillaries of the skin as by the digestive tube. But oils of a mineral base, such as petroleum, etc., are rejected as being artificial, irregular, and even caustic. The volatile essence contained by sterilized olive oil travels with the blood till it reaches the lungs, and there, being placed in contact with the air the patient breathes, becomes diluted in the lungs, evaporates, and escapes with the breath. Thus the patient's breath smells of eucalyptol very shortly after the injection, and subsequently both the sweat and the urine have the same odor. When thymol is used the odor is very pleasant, and several patients have been surprised and pleased to find how sweetly they were perfumed by this medical treatment.

Naturally the injections have to be taken for several months, as the perfumed effluvia must be absorbed—must, in fact, embalm the entire body to preserve it, as that of a mummy, against the destructive microbes. The friends or nurse of the patient can easily be taught how to perform the operation. This, done systematically and persistently, will, Dr. Roussel maintains, kill the bacillus of Koch, especially if it be a case, not of inherited, but of contracted phthisis. The first cases treated in this manner by Dr. Roussel date as far back as 1883-'84, and some of these patients have enjoyed good health ever since. A female patient of the late Dr. Fauvel, the eminent physician who presided at the International Congress of Hygiene of 1878, was sent to Dr. Roussel by Dr. Fauvel. Her right lung was affected, and numerous bacilli had been found in her sputa. The treatment commenced in January, 1883, and in January, 1884, the bacilli and all acute symptoms had disappeared; the patient gained weight and has ever since been able to work, earning her living as a seamstress. This patient has been seen and examined by numerous physicians, and the case is interesting principally because it is one of the earliest on record. In the month of March, 1888, Dr. Roussel brought before the Society of Practical Medicine eighteen patients suffering from phthisis. In the month of March, 1889, he brought the greater number of the same

patients before the society so that they might be examined by the same medical men who had seen them a year previously. These eighteen patients had received altogether 4,714 hypodermic injections. One of the eighteen patients, who seemed to have recovered his health, started on a journey, contracted double pneumonia, and died. Drs. Tison, Guerder, Duchesne, Gaudin, Thermes, Boyer, Gronineau, and others examined, at the end of the year, fifteen or sixteen out of the eighteen patients. They all testified that the place where these numerous hypodermic injections had been administered remained in a perfectly normal condition. There was no inflammation. Dr. Dujardin-Beaumetz presided at this sitting, and a resolution was carried to the effect that the numerous injections of various substances had left no trace whatsoever. On the other hand, the patients were either to all appearances cured, or very greatly improved in health. In several instances the analysis of the sputa showed that the bacilli of Koch had disappeared altogether. Apart from these particular cases brought before the Society of Practical Medicine, Dr. Roussel has some thirty double analyses of the sputa of his patients made either at hospitals or by eminent bacteriologists. The first of these two analyses for each patient shows that the bacilli of Koch abounded in the sputa. The second, made generally twelve months later, declares that the bacilli had disappeared.

In 1886 Dr. Benjamin Ball made experiments at the Laennec Hospitals for Incurables, carrying out Dr. Roussel's system. Out of twenty-one patients, ten were able, after treatment, to leave the Hospital for Incurables and resume their work, five were still under treatment at the time these facts were reported by Dr. Ball to the French Academy of Medicine, six had died. Dr. Ball stated in his report to the Academy of Medicine that the hypodermic injections had a marked effect on the "septic" symptoms of phthisis; namely, there was a cessation of night-sweats, of diarrhea, a reduction of the expectoration and the fever, together with improved appetite. Dr. Ball could not affirm that a cure had been found for phthisis, as the experiments had not been made on a sufficiently extensive scale; but evidently there was good ground for hope.

On July 7, 1887, Dr. Roussel explained to the Society of Practical Medicine that one of the great obstacles to the diffusion of the hypodermic method was the imperfection of the instruments. The syringe generally used for the injection of morphia is altogether unsuited for constant treatment. The metal is too readily oxidized, and the instrument can not easily be

kept clean. Nor are the needles long enough to traverse the dermis. The liquid oozes out again through the channel pierced by the needle, and irritates the nerves and capillaries on the surface of the skin. Dr. Roussel employs a syringe made of celluloid, a substance composed of camphor and cellulose treated by nitric acid. Hard, transparent, unbreakable, non-porous, it can not be affected by the metalloids and alkaloids used for hypodermic injections. The needles are of steel, covered with platinum, and four centimeters in length. They carry the liquid under the cutis as far as possible from the puncture on the skin. By the nature of the instrument employed, by the antiseptic precautions taken, by the easy assimilation of the vehicle, sterilized olive oil, in which the medicament is diluted, all accidents that might otherwise result from the constant practice of hypodermic injections are avoided. These latter practical considerations are, he considers, of the utmost importance, for many failures have attended this mode of treatment, not because it was wrong in principle, but because it was clumsily applied.

During the Medical Congress held in Berlin last August Dr. Roussel went to the Charity Hospital and there performed many hypodermic injections on patients suffering from phthisis to show how this could be done without inconvenience or accidents. Whatever may be the secret of Dr. Koch's treatment of phthisis, Dr. Roussel claims that since 1883 he has, with marked success, treated this malady by hypodermic injections of metalloids and alkaloids. Dr. Roussel also has not hesitated to supply Dr. Koch, in response to the inquiries made by the eminent German professor, with full details as to his mode of procedure. In fact, there is no secret whatsoever in Dr. Roussel's system. The profession are welcome to make every inquiry, and he is ready to show every thing, even his patients, to competent investigators.

Such are the main features of Dr. Roussel's claim to be heard on the question of the possible remedy for phthisis. In this description of the facts and arguments adduced by Dr. Roussel there is no attempt at criticism. The sole purpose in view is merely to state Dr. Roussel's case, for it can not fail to be of interest when so many hopes are being awakened as to a possible remedy for phthisis.—*London Lancet*.

THE PSYCHOPATHIC SEQUENCES OF HEREDITARY ALCOHOLIC ENTAILMENT.—Nothing in neuropathology is now plainer than the retrograde heredity of chronic alcoholics. The alcoholic poison interferes with the highly organized physiological movements of the psychical centers, arrests and perverts the complex

activities of the cerebral cortex, and begins a decadent and perverted neural metamorphosis that goes on from one stage of instability to another until the final ending of all neural instability is reached (unless fortuitously arrested) in dementia or imbecility and death, when even perverted neural force can no longer be evolved. The evolution of the cerebro-psychical centers thus arrested or perverted ends in final dissolution and extinction of type.

The neuropathic thrall of entailed alcoholism is no new theme to neurologists. It was familiar to Benjamin Rush, and the researches of Morel in the field of neuropathic degeneracy sequent to ancestral alcoholic excess have been so often affirmed and reaffirmed by credible medical testimony that no doubt now remains in the medical mind of the power of excessive ancestral alcoholic indulgence to pervert neuro-psychic function in the descendants of victims of this vicious disease.

We need not dispute the point as to whether alcoholism is a vice or disease, for it is, and it may be both or either; and whether it in the beginning be one or both, its ending is always in disease, which is either the beginning or continuance of a transmitted neuropathic or neuro-psychopathic heritage.

If the first generation, as Morel has observed, shows immorality, alcoholic excess, and brutal degradation, the second one will usually show, as he also observed, hereditary drunkenness, maniacal attacks and general paralysis or some similar psychopathic affection. The third generation may show sobriety, but, instead of the transmitted drunkenness, the hereditary neuropathic perversion will probably reveal itself, as Morel saw it, in hypochondria, mania, lypomania, and tendency to homicide and suicide; and we shall see in the fourth and after-coming generations feeble intelligence, stupidity, early insanity, and the beginning of the end of the family in extinction.

All alienists have confirmed this observation of Morel, and the fatal heritage of chronic alcoholic toxemia is proven upon those living within the walls of asylums for the insane the world over, and in every walk of life without, and upon the cadavers of those who have died under the power of this neuro-toxic force. We no longer need the extensive clinical observations of Magnan nor the later pathological researches of Bevan Lewis for proof. The diseased arterioles, the granular degenerations of the nerve cells, pericellular and perivascular nuclei proliferation, aneurismal dilatations, and exudative and indurative cerebral changes are too familiar now to be longer doubted; and witnesses too many to be here enumerated, embracing all who have clinically studied inebri-

ty, attest the fact that the habitual long-continued use of alcohol as a beverage in excessive quantity in one generation makes an indelible impress upon the nerve stability of the generations that follow.

It has the undoubted power of engendering neuropathic and psychopathic conditions directly in the individual, besides a great number of extra-neural morbid conditions, as the oft-observed and no longer doubted delirium tremens, epilepsy, insanity, and imbecility, paralysis and the neuritides of drunkards show; and the morbid entailments of alcoholic excess do not stop with the individual, as we have seen. They pass over in greater force to his descendants. This is the gospel of science. These morbid endowments of the drink habit are more apparent in the drunkard's progeny, for the reason that his children come into the world dowered with less power of neurotic resistance to the depressing and perverting assaults of alcohol and its compounds upon the integrity of the ganglion cells of the cerebrum and the nervous centers of the whole cerebro-spinal axis and sympathetic system.

By reason of a better organic heritage and the greater inherent power of vital resistance, the drinking person may show but little of the inroads his alcoholic excesses are making upon the physiological soundness of his cerebro-spinal and ganglionic centers. An occasional or single epileptic seizure during a debauch, or none at all, during a life given to drink, some perversions of disposition or mental depression, or a day or two of trance following a prolonged spree once or twice in a lifetime, or none of these evidences of cerebro-psychical damage may so markedly appear. (The subject of alcoholic trance is too extensive to be treated here as its forensic merits require. We content ourself now with a simple note. *Vide finis.*)

One of these positive and more directly perceptible consequences of alcoholic damage may appear directly in the individual. He may go through life moderately full of alcohol, able to attend in a fairly good manner to the routine demands of his business, to be cut off prematurely under some slight extra organic strain (for one of his extraordinary hereditary endowment of nerve resistance, by an apoplexy, cerebral or pulmonary, which another less strongly endowed for resistance by nature would have withstood. His ganglionic centers fail him in some vital crisis, and the "silver cord is loosed" forever.

The nerve mechanism, which never escapes in the habitual or periodic excessive drinker, but more especially in the regular so-called moderate social drinker (who never sprees, though

seldom refuses when asked to drink, who takes his regular evening night-cap and morning eye opener and tri-daily appetizer) is the vaso-motor system. This failure causes the pneumoniatic to die from an attack of lung fever of no greater severity of causation than that of which his non-drinking fellow in the next bed promptly recovers. He may die prematurely of an over-worked kidney or an overtaxed liver, by reason of ganglionic paralysis (and I believe that overdilatation of the renal circulation from the general vascular hyperemia of overbrain-strain and alcoholic stimulation combined are the remote causative factors of Bright's disease), and neither he nor his friends may think that alcohol has done him harm.

But look at the drinking man's children! He may have been himself a very proper and apparently healthy citizen, beginning in early life a regular business, and having acquired and filled a regular and honorable business place in the world, and never seriously sick till the last acute illness that suddenly carries him off before his physiologically appointed time.

Why is one child an idiot or imbecile, another erratic, moody, violent, visionary, melancholic, or insane, epileptic, choreic, or suddenly criminal, despite the best of training and environment, especially among his latest offspring, while only the children born of his loins earlier in life, when alcoholic excess had made no organic impress upon him, are ordinarily healthy in mind and body?

The habitual disturbances of organic function—morbid physiological exaltation and reactionary morbid depression, through increased vascular relaxation and consequent capillary congestion—may not materially affect the integrity of function in the matured cells of the psychical centers of the parent of sober lineage, so as to markedly modify their matured and long-established habit of acting, but in the drunkard's child, who starts unstably endowed by hereditary neuropathic entailment resulting from an ancestor's alcoholic excess, the resistance power of the parent or parents in early life is not in the child's organism. He is a step lower than his father or mother, or both, if they were habitual drinkers, in the scale of organic degradation, and has, in consequence, feebler resistance to the assaults, not only of alcohol from within, but of adverse environments from without, and they reveal this hereditary organic degradation in erratic actions, morbid insane, and criminal conduct—conduct which in them is always the offspring, in whole or in part, of disease—disease within. Upon them, consequently, influences without their organisms, resisted by others, have an overpowering force. Their environment leads them irresistibly into

crime, like the extraneous circumstances which cause in them disease their parents had not shown, and crime their parents would have resisted.

The drunkard's child's crime is not all his voluntary crime, nor his vice-engendered disease all disease of his own making. His father or his father's father or mother may have deliberately chosen that which, with all its voluntary seeming in the boy, is become to him an inexorable morbid fate, appearing as immoral conduct. "The fathers have eaten sour grapes, and the children's teeth are set on edge."

With this too cursory preliminary review of what we know of the hereditary neurotic enthrallment of alcohol, we record an interesting hypothetical case, which we will suppose to cover the facts in an important medico-legal record of entailed alcoholic disease and crime perpetrated under its fatal sway.

HYPOTHETICAL CASE.

Suppose a young man approaching his majority, naturally kind of heart, not reared in crime nor in the slums of a city's poverty quarters, but in comfortable circumstances and fairly educated among correct people, commits an unprovoked murder of one of the dearest and nearest of his friends. In his family the following abnormal traits appear: On the maternal side a grandfather is a man of excess in eating, drinking, etc., inebriate and melancholy, and he dies of apoplexy. An only son survives him long enough to develop inebriety and die of drink in his youth. A brother is like himself, and dies a drunkard. Sisters and cousins in varying degrees, according to environment, exhibit the same failing. A grandmother at an early age drank liquor to excess, and died prematurely in consequence of excessive drink. All the sons of the grandmother's sisters died young in consequence of drink. Of the remaining ancestry of this alcohol-tainted organism, one uncle was, from early youth, addicted to alcoholic indulgence, his thirst for drink becoming finally insatiable, and he died of delirium tremens in early manhood, after previous attacks of acute alcoholic insanity. Another uncle was also addicted from his early youth to the use of alcohol to inebriety, and final melancholia and insanity with delusions of dread and suspicion. Several sisters of these two men were victims of the hereditary failing, among them the mother of the supposed young man we are considering. The boy's father, too, was, in early life, before the boy's birth, an intemperate man, and the boy himself was from early puberty intemperate, unstable, and choreic, and had suffered in childhood from a physical shock to his nervous sys-

tem, caused by a violent fall. This young man in question, when under the influence of liquor, was a markedly changed man, and when the time of one of his periodically recurring sprees would come around he was likewise very different from his natural self, being moody, listless, drowsy, and melancholy; and after indulging in his inordinate craving and unnatural appetite he would become exhilarated, reckless of danger, excessively cheerful at times, and extremely violent toward and suspicious of his best friend, filled with morbid fears and dreads and suspicions. When sober he was nervous, restless, and unhappy, and whenever he got a taste of liquor he would invariably drink to excess—drinking to exhaustion, prostration, and illness in consequence of his excesses. Suppose for five or ten years the life of such a person was almost one continual succession of sprees—suppose such a man after such a life, and at the close of a several weeks' prolonged spree, takes the life of his best friend by manual violence while struggling to get money from this friend who had refused it, and with the aid of an accomplice takes money, jewelry, and other valuables from his person, pawns some of the things for liquor, making no attempt to escape, and, not appearing to remember or realize the enormity of the crime committed, remains in the neighborhood of the murder intoxicated until arrested, remembering the fact of the robbery, but not believing the party robbed and maltreated was dead or seriously injured.

This is a common kind of inebriate crime. This picture would answer for the ordinary portraiture of the average inebriate criminal arraigned in our courts of justice. It is of necessity so drawn as not to describe personal cases that have come under my professional care, but it is true to inebriate nature, as I have seen it all too pitifully and painfully portrayed, and will answer well for a composite picture of morbid, as contradistinguished from purely immoral inebriety and crime. The picture is not overdrawn, but is faithfully true to nature.

I have purposely put in a criminal motive in the above hypothesis, that the natural semblance to crime may appear just as it appears in many cases of insanity. The inebriate and the insane persons act, unless totally demented, from motives more or less apparent, but the hidden springs of human conduct in both are different from those in the rational and healthy mind. A different combination of morbid influences, ancestral and immediate, in the nervous organism of the chronic inebriate or the periodical inebriate unites with his environment in the drink-enthralled man, from that which influences and determines ordinary human conduct in sane and temperate men.

1. Assuming the above hypothetical case to be true, what would be your judgment as to the existence or non-existence of hereditary alcoholic degeneracy and impairment of the brain, and the existence or non-existence of dipsomania, or involuntary and resistless impulse to drink alcoholic liquors to excess, in the case of the supposed youth, and degree of irresponsibility from drink?

2. What was the mental condition of the supposed person when he committed this unlawful deed?

3. What is the effect on the mind and on the will of such an inherited taint, united with the state of chronic alcoholism, as in the case of such a supposed youth?

Such, with more or less completeness of specific detail, is the character of the hypothetical case and interrogatories, of late years propounded in our courts to the experts in psychiatry, for the neuropathic entailments of chronic ancestral alcoholism. Thanks to an enlightened judiciary in some of the American States, aided by the wise and judicious efforts of our medico-legal societies, inebriety has become a recognized extenuation and often complete and just excuse for crime perpetrated under its potent and often resistless morbid influence, and the following, or something like them, are still the customary interrogatories propounded, *pro forma*, by the counsel for the State:

Is it your opinion that such a supposed person was unable to distinguish between right and wrong?

Or, perchance, the more enlightened and just interrogatory like the following is offered by the State: "Will you say that a person so affected could not tell that an act which he committed was wrong, or, if conscious that it was wrong, is it your opinion that he was incapable of resisting the impulse to commit it, by reason of disease hereditarily entailed or acquired?"

It were fortunate for the unfortunate victim of the faulty and imperiously unstable neuropathic heritage of long-continued or hereditarily transmitted alcoholic indulgence if a wise, humane, and considerate counsel and court secure such just instructions in such clear conformity with the facts of clinical observation and experience as the last interrogatory would warrant; for inebriety, either in its periodic or continuous forms, is a disease, as much so as the recognized and acknowledged phases of insanity, epilepsy, idiocy, and imbecility it both directly and indirectly engenders; and while, in considering it in its medico-legal relations, we have also to consider the accompanying factor of a once normal volition, we have in the inebriate a mind and will always more or less mod-

ified, perverted, deranged by disease, alcohol being itself a directly toxic agent, in its influence on the brain and allied nervous system, as well as potentially poisonous to the blood itself in any considerable quantity, and especially so, as all experience proves, when long continued, in excess, in either the individual or his ancestors.

It is, indeed, a strange phenomenon of the human mind in its forensic relations that an agent which the world recognizes and acknowledges as the parent of pauperism, insanity, and crime, and the chief direct or indirect populator of penal, eleemosynary, and correctional institutions, and the proven cause of so much disease, misery, and death, should be held responsible to the extent it is before our judicial tribunals, when the hapless and often hopeless and helpless victims of its vicious power are arraigned to answer for crime committed through its influence over their involuntarily enslaved organisms—organisms often prenatally predestined to pathological perversion (as most of the unfortunate inmates of asylums for the insane are organically predetermined to an aberrant course of life conduct), through the alcoholic excesses or other neuropathic disorders of ancestors, or through a precocious drink-craving, however engendered, whether ancestrally or self-acquired, and prematurely and excessively indulged, to the harm of the delicate machinery of the brain.

The force of physiological habit is recognized in all of our dealings with men. Why, then, should courts ignore the power of that neuropathic thralldom which alcohol undoubtedly engenders in certain individuals, to their harm and the harm of the world about them, enchaining, enslaving, and perverting conduct, until the unfortunate slave of its vicious sway is no more in harmony with his natural self, unperturbed by this disease, than the lawfully and justly consigned inmate of a lunatic asylum is?

The dipsomaniac is as surely perverted and deranged in his brain and connected nervous system as any other lunatic, and the confirmed inebriate claims our sympathy and succor and the kindly consideration of the law, because he is the victim of disease. It is for humanity and law to decide in each individual instance, however, how far on the one hand inebriety should extenuate crime, and to what extent on the other it should punish the volition that may have engendered the disease. It is a plain proposition, which admits of no doubtful interpretation, that acute alcoholism voluntarily and premeditatively induced, or even voluntarily yielded to, for the purpose of committing or shielding from crime, is as culpable as any other criminal intent, while on the other hand a dis-

eased propensity to drink, indulged in obedience to the promptings of a resistless organic aptitude handed down from father to son, or transmitted through the womb of an acclimated or otherwise neuropathic mother, should receive a different consideration, just as any other neuropathic heritage causing psychopathic perversion extenuates even the most heinous of crimes in the eye of the law and in the judgment of courts.

Our ancestors in the medical profession rescued the lunatic from the neglect and violence of ignorance; let us protect and save the nerve-degenerate inebriate.—*Dr. C. H. Hughes, in Alienist and Neurologist.*

IS DIABETES MELLITUS EVER CONTAGIOUS?—Many theories have been advanced to explain the origin of this complaint. It has been ascribed to heredity, to excessive use of certain foods, to sudden grief, etc. It is probable that diabetes mellitus is not a single disease, but rather a symptom which is common to several disease processes.

In the *Berlin. Klin. Woch.*, No. 20, 1890, the theory is advanced by Dr. Schmitz that certain cases of diabetes mellitus arise by contagion. He opposes the theory of an emotional cause, on the ground that in cases under his care the reception by diabetic patients of the most depressing news, which has almost driven them into insanity, has had no influence whatever upon the amount of sugar excreted. His experience with diabetes mellitus embraces now more than two thousand cases. He was first led to suspect that the disease could be communicated from one patient to another by observing the frequency with which husband and wife were affected. He has now collected twenty-six cases in which persons in good health (generally wives), free from hereditary taint, not great sugar eaters, and who have never had rheumatism, have suddenly manifested unmistakable symptoms of the disease, after prolonged and confining attendance upon diabetic patients not related to them by blood.

Although his theory conflicts with the teachings of eminent writers, he feels that such a rich experience warrants an open expression of his belief. Circumstances have hindered him from supporting his views by experiments looking toward the production of the disease in animals. He gives, however, instead of such records, a brief account of several of the more striking cases in his practice.

In one case, a man of forty-eight years, suffering with diabetes for two years, was treated at the sanitarium. Two years later he returned still diseased, and his wife, a previously robust and healthy woman, came with him to be treated

for the same trouble, which led to her death a few months later. No other cause than contagion could be discovered.

In another instance, a man of thirty eight years, known to have had diabetes for one year, died in the sanitarium a month after arrival. Two months after his death his widow, who, when she brought him to the sanitarium, had been a picture of health, and who had nursed him there, asked advice for an intense pruritus, which was readily traced, after careful examination, to diabetes mellitus. She presented no evidence of hereditary predisposition to the disease, and no other cause than contagion could be found. She returned next summer for treatment, and in the autumn married again, the husband being healthy, of good family history, and not her blood relation. Two years later they returned together, both having plain symptoms of diabetes mellitus.

In a third case, a lady who died of diabetes had been attended most faithfully by a young friend twenty-five years of age. This young lady was in full health and very robust, without family history of diabetes or any other known predisposing influence. Shortly before her friend's death she began to feel somewhat out of health, but this she ascribed to the strain of nursing. Several months after her friend's death, on her return from a trip to Switzerland, she sought advice on account of debility and loss of flesh, which had persisted in spite of mountain air and the milk cure. Her urine contained five per cent of sugar.

Dr. Debove, of Paris, has also observed cases very similar to those reported by Schmitz, and made his observations the subject of a paper read before the Hospitals Medical Society in July, 1889. He does not seek the explanation of these occurrences in contagion, however, but rather believes with Lecorché that the coincidence of the same disease in man and wife, or in persons living together, is due to the fact that both make use of the same unsuitable and defective nourishment, and that they share with each other various mental anxieties and other etiological conditions.—*N. Y. Med. Rec.*

THE CURE FOR CONSUMPTION.—With Koch's recent brilliant discovery man takes another step forward in his evolutionary career, obtains yet a little more control over circumstances, makes yet a little further advance toward complete correspondence with his environment. Nor is it now deemed over-sanguine to predict that this is but the prelude to other triumphs of a similar kind, and that the time will not be long delayed when others of his fell enemies, such as malignant tumors (themselves, who can doubt, parasitic, like tubercle), shall succumb

to treatment. An important and oft-mooted question hence now forces itself upon us with peculiar insistence, whether, namely, the human race actually benefits in the long run by those artificial checks upon the operation of natural selection to the number of which increasing knowledge is continually adding. Manifestly, by artificially rescuing from death those who are prone to disease we increase the racial predisposition thereto and lower the standard of health. The individual with a compound astigmatism wears eyeglasses; another, a truss to keep up a hernia; a third, elastic stockings for varicose veins; again, another has been operated upon for vesical calculus, and all probably have been inoculated against smallpox (soon it will be against tubercle too). But the result in any case is not perfect health. There is at the best but a patching and propping, often felt to be so imperfect that the cry is raised, "Were it not better not to be!" Thus we have to face another question, this time an ethical one: How far is an individual who has been artificially rescued from the death that would have resulted from an innate weakness justified in leaving posterity to continue a like maimed existence? I merely raise the question; I do not in the narrow limits of a letter attempt fully to answer it. All I will say is, that the artificial interference with the operation of natural selection does not lead to such disastrous consequences as might at first sight appear. But, with regard to tubercle, I am convinced that it is far more frequently the result of unfavorable circumstances than of inborn weakness, and notably among the poorer classes; in other words, that the soil favorable to the tubercle bacillus is far more frequently acquired than simply inherited. I presume none will deny that among children, at least, the condition of tissue which harbors the tubercle bacillus is generally that afforded by the so-called "strumous" diathesis. But what is this but a more or less faulty state of nutrition, the result of unfavorable external conditions? I have never yet seen in a child an example of this diathesis owning any other source. To put this statement in another way: If we suppose that the strumous diathesis is met with among the children of the very poor in London in the ratio of twenty per cent (a very low estimate), then I venture to say that if this unhappy percentage were fed from earliest infancy on healthy mother's milk, and subsequently brought up in country air, under perfectly sanitary conditions, the strumous diathesis would be practically reduced to *nil* among them. On the other hand, it must be granted that tubercle may develop in individuals who are in no wise strumous, some-

times striking down some of the apparently most perfect physical specimens of humanity, and I would throw it out as at once a possibility and a hope that in the far future it may be to this class, and to this class alone, that it will be necessary to apply Koch's method. For the strumous diathesis is not the result of an inborn weakness, but of a fundamentally wrong environment, and should surely be dealt with as such.—*Harry Campbell, London Lancet.*

ALBUMINURIA IN CHILDREN.—Dr. Seyournet, in the *Union Médicale du Nord-Est*, describes a form of albuminuria which he considers is more frequent than is generally supposed among children. It differs from the scarlatinal type usually observed. He studied the former type among children of the age of from eleven to sixteen months. A great many of the patients had been brought up on the bottle, having been fed on unsuitable food, causing distension of the abdomen or stomach, or occasionally enlargement of the liver or intestinal disorders, accompanied by vomiting or diarrhea. He believes this special form of albuminuria to be of an infectious character, and traces it back pathogenetically to certain toxic substances which are generated by abnormal fermentation in the bowels. These substances are absorbed by the bowels and pass to some extent into the kidneys. They produce congestion in the renal tissue which may lead to inflammation of the kidneys. One of Dr. Seyournet's little patients had scarlet fever twenty-two days after convalescence from this albuminuria. It is evident from this fact that it was not scarlatinal albuminuria. It was usually accompanied by anuria, whereby the congested condition of the kidneys was intensified. With some of the patients the daily evacuation of urine was only half an ounce. In one case the patient passed no urine for more than forty-eight hours. Notwithstanding this, no uremic symptoms appeared. It was in most cases only the anuria which led to the urine being examined for albumen. The result of the examination in each case was positive. A strongly marked feature of this disease is the edema of the feet, sometimes also of the hands and of the eyelids and face, but the latter were not always affected. The quantity of albumen varied from a dram to ten drams per diem. The duration of the disease was from two to four weeks. The treatment consisted in giving milk, which in some cases was mixed with lime water. Where there was vomiting, gentle aperients, such as castor oil or calomel, were given; salicylate of bismuth was employed in order to disinfect the bowels as much as possible. Systematic massage of the lumbar re-

gions was also employed in order to relieve the congestion of the kidneys.—*London Lancet.*

ADMINISTRATION OF CHLORALAMID.—Much depends upon the proper administration of the new hypnotic, chloralamid, to obtain the full effect and satisfactory and beneficial results. The dose is from fifteen to sixty grains, with an average dose of thirty grains. Chloralamid is soluble in about twenty parts of cold water and in one and one half parts of alcohol.

An additional caution is necessary. Never dissolve or dispense chloralamid in hot water or warm solutions, as the heated preparation decomposes.

The best modes of administration are:

1. In a teaspoonful of whisky or brandy.
2. In properly proportioned solutions with wine, spirits, or spirituous compounds.
3. In a small cup of cold water or cold tea.
4. In powder form, in waters or cachets washed down with cold water.

The following formulas have come well recommended, and bear the stamp of general approval and adoption:

Dr. W. Hale White (British Medical Journal) says: "I always prescribe it with spirit; twenty grains will dissolve in one dram of rectified spirit in fifteen minutes, and water may be added to this solution without reprecipitating the drug. A good way of giving it is to tell the patient to dissolve it in a little brandy, add water to his liking, and drink it shortly before going to bed."

From an editorial in the Medical Summary, Philadelphia, we quote:

Chloralamid	5 iv;
Spts. vini gallici.....	3 iv;
Curacao	3 iv.

M. A teaspoonful (15 grains chloralamid) in water, and repeated in four hours, if necessary.

Dr. John Aulde suggests:

Chloralamid	5 iv;
Spts. frumenti.....	3 iij;
Elix. aurantii, sufficient to make	3 iv.

M. Take one tablespoonful (30 grains chloralamid) in water.

Another popular prescription, extensively used in New York, is this:

Chloralamid	5 iv;
Tinct. cardamom. comp.....	3 ii;
Elixir simplex.....	3 ii.

M. Take a teaspoonful as a dose.

This further suggestion is taken from the Medical News: Schmidt employs chloralamid hypodermically, the solution used being thirteen grains of chloralamid dissolved in five drams of distilled water. Sixteen minims of

this subcutaneously is usually a sufficient dose, and acts more rapidly than larger doses given by the mouth.—*Notes on New Remedies.*

PULSATING LIVER.—The close vascular relationship between the liver and the right heart furnishes a ready explanation of the close functional relationship between these two organs. But, apart from functional derangements, the consequence of congestion of the right heart, we are familiar with definite hepatic physical signs in evidence of such congestion—*e. g.*, the signs of a swollen liver. Accompanying the swollen and tender liver there is present nearly always epigastric pulsation, more or less pronounced. This epigastric pulsation is usually the result of transmission of the ventricular beat by the depressed and turgid liver; sometimes, as Dr. Balfour points out, the impulse is a transmitted one from the great vessels lying against the spine, the vena cava, and the aorta; in either case the liver acts merely as a tumor lying against a pulsating vessel. Sometimes, however, the liver actually throbs, every part of its substance expanding with each stroke of the heart. This is a comparatively rare accompaniment of disease of the heart. There is at present in the Royal Free Hospital, under the care of Dr. Sainsbury, a case of this kind. The patient is a lad, aged eighteen; he has suffered from shortness of breath ever since he had St. Vitus' dance at the age of ten; since then he has had two attacks of rheumatic fever, and during the last year his heart trouble has culminated. He was admitted into the hospital in February of this year, was discharged in April, and readmitted toward the end of October. The heart at present is enormously enlarged, dilatation preponderating. There is evidence of mitral and tricuspid regurgitation, and doubtfully of aortic regurgitation. The vessels of the neck pulsate as far as the angles of the jaw; the feet are slightly edematous. No fluid can be detected in the abdomen; the lungs manifest the signs of bronchitis at the bases. The edge of the liver extends from below the right anterior superior spine of the ilium upward beneath the umbilicus to the ninth or tenth left costal cartilage. There is some tenderness of the surface, and when grasped between the two hands there is distinct expansile pulsation, which, as compared with the carotid pulse, is slightly delayed. There is pulsation underneath the xiphoid cartilage, which is obviously transmitted from the heart. The apparent enlargement of the liver is increased by the depression of the diaphragm by the enormous heart. The spleen is not felt. The case is worthy of notice, not only because of the liver pulsation, but because of the selec-

tion, as it were, of that organ to relieve the congestion of the right heart, and because the portal obstruction thus caused has not led to ascites. The absence of much general dropsy is also of interest.—*London Lancet.*

STYRON IN CHRONIC PURULENT OTITIS MEDIA.—Dr. Cheltsoff, *Bolnitchnaya Gazeta Botkina*, May 9, 1890, ascribes great value to styron in the treatment of chronic middle-ear disease, which does not yield to the most energetic treatment of other remedies. He made special observations in eight cases, and obtained brilliant results.

In one case of otitis media of three years' standing the ear was syringed with a solution as follows:

Styron.....	3i;
Alcohol.....	f3i.

One part of the above to twenty parts of water. The purulent discharge and inflammatory condition of the ear disappeared. The patient was cured and discharged from the hospital within twelve days from the beginning of the above treatment.

He had another patient, twenty-one years old, with purulent otitis media since childhood; an acute exacerbation with extreme shooting pain in the ear made the patient call for treatment. Syringing with water for several days did absolutely no good. But when twenty parts of the solution of styron to two hundred parts of water were used to syringe the ear with three times a day the pain, swelling, and tinnitus aurium were relieved within two days. The patient asked for his discharge from the hospital after the fifth day. On the last examination the swelling in the auditory canal was absent, and the middle ear was free from all inflammatory product and had a normal appearance. During the treatment with styron the author tried in the above cases 1-8,000 of bichloride of mercury solution as a substitute; then the purulent discharge appeared the next day in large amount, and disappeared the following day after the use of styron was resumed.

There are two forms of styron, the crystal and the liquid. Both have the same virtues, the liquid being the least expensive.

Dr. Cheltsoff used an alcoholic solution, and, in order to ascertain that it was not the alcohol that was so beneficial in the purulent cases, he syringed the ear with alcohol during treatment, which was followed by increased discharge from the ear. The styron used after it, however, made the pus disappear permanently. The author states that when there was much pain it was immediately relieved by styron, and that the latter was an excellent analgesic in all his

cases. At present styron is a favorite remedy in the hospital for all obstinate purulent conditions.

SULPHAMINOL AS AN ANTISEPTIC.—According to the *Journal de Médecine*, September 7, 1890, sulphaminol or thio oxydiphenylamine is prepared by exposing the salts of oxydiphenylamine, dissolved in water, to the influence of sulphur. The product thus obtained is a light yellow powder, odorless and tasteless, which dissolves easily in alkaline solutions, and more easily in solutions of alkaline carbonates. Alcohol and acetic acid also dissolve it. Solutions of it have a light yellow color. Sulphaminol becomes brown and deep colored at about 311° Fahr.

In contact with the juices of the body sulphaminol separates into its two components, sulphur and phenol. Each of these two bodies having great antiseptic power, it follows that sulphaminol is used in medicine principally as a substitute for iodoform, without possessing the disadvantages of the latter. In the urine it appears as oxydiphenylamine. R. Kober, of Dorpat, has subjected sulphaminol to experiment, and has proved its perfect harmlessness. Dogs tolerate as much as nine decigrams (fourteen grains) of the drug, administered subcutaneously, per kilogram of body weight. No symptoms of poisoning or of suppuration were observed when this dose was given, and even the appetite of the animals was unaffected. Sulphaminol has no toxic effects on man.

Moritz Schmidt, of Frankfort on the Main, reports successful results with it in laryngological practice. He has employed the preparation especially in suppurations of the maxillary sinus. The strong odor of these suppurations, he says, is dissipated easily only by iodoform and sulphaminol; and as the latter is entirely odorless it is altogether preferable to the former.

CHLOROFORM ADMINISTRATION IN NASAL OBSTRUCTION.—If complete nasal obstruction exists and the mouth be closed, it is obvious that the air supply is cut off. This sounds like a truism, and yet I am not aware that it has received due attention. It is, I believe, routine treatment, or was, in chloroform narcosis, when the breathing became embarrassed, to open the mouth and pull forward the tongue; but whether it was fully recognized that the impediment to the entrance of air was frequently caused by obstruction other than that due to spasm of the glottis, a falling back of the tongue, recession of the epiglottis, I am not prepared to say. I was myself until recently unacquainted with the fact.

Perhaps a case will better illustrate the point.

A boy, the subject of post-nasal growths, was anesthetized, or rather the attempt to anesthetize him was made in the ordinary way by means of a Skinner's apparatus. I say attempt, for from an early period the breathing became embarrassed, and but little air or chloroform vapor was inhaled. The respiration was shallow, there was much sinking in above the clavicles, and these symptoms were not materially relieved by elevation of the chin. Some time before the conjunctival reflex was abolished breathing became imperceptible; the chloroform was removed, the chin strongly elevated, and breathing somewhat deepened again. The mouth all the time was tightly closed, being opened eventually with difficulty. The moment, however, that this was accomplished the breathing became free and he was quickly narcotized. Later in the course of the operation an accident occurred which again proved the necessity of the open mouth. The gag slipped, the mouth closed, and the breathing immediately became embarrassed again. It was simply open mouth, for the tongue was not interfered with, neither was the chin raised. I take it, in such cases as these, the ordinary method of raising the chin must be abandoned, for, the nose being obstructed, elevating the chin will close the mouth, and thus cut off the only air portal. If a gag be inserted and but partly opened, the difficulty will be overcome. The case I have described is a typical one, but before this came under my observation I had seen several cases which illustrated the point in only a lesser degree.—*F. G. Harvey, London Lancet.*

THE REMOVAL OF MICRO ORGANISMS FROM WATER.—Dr. Kruger, considering the fact that more bacteria are usually present in rivers than in lakes, notwithstanding that lakes themselves in many cases are more or less polluted by rivers passing through populous towns, believes that this rapid decrease in the number of organisms may very possibly be due in part to the action of direct sunlight, but in the main to the tendency of water in a comparatively undisturbed state to deposit and precipitate. He therefore carried out a number of experiments with a view to determine how far the removal of organisms was brought about by the mere mechanical deposition of inert matter and also by precipitation as a result of chemical action. The mechanical precipitants employed, all in a state of fine powder and sterilized, were alumina, brick dust, clay, chalk, sand, coke, and charcoal. Water obtained from an ordinary service-pipe was impregnated with a liquid containing a bacillus growth of a species incident to tap-water. This was divided into

two portions—one for precipitation with the inert substance, and the other was untreated for the sake of comparison. Experiments were similarly carried out in which precipitation was obtained as a result of chemical action such as is brought about by the addition to the water, containing naturally lime, magnesia, etc., substances like wood ash, sulphate of alumina, and slaked lime. The general conclusion comes to by the author from the results obtained is, that undoubtedly large numbers of bacteria are carried down by inert substances merely sinking in the water, but that the action is very considerably increased when, in addition to mechanical deposition, a chemical precipitation also takes place. The corollary is evident: inert substances do mechanically assist in the precipitation of micro-organisms, but preference should be given to chemical treatment.—*Druggists' Circular*.

A CASE OF PEMPHIGUS VEGETANS (NEUMAN).—An interesting case of pemphigus vegetans was recently related by Dr. Chas. Szadek in the *Satellite* for April, 1890. The patient, a woman aged thirty-five, married, was first taken ill at the beginning of May, 1889, with glossitis, stomatitis, and angina erosiva. A few days later bullæ appeared on the mucous membrane of the vulva, soon after followed by others on the skin of abdomen and internal surface of the limbs, and later in the groins, the axillæ, neck, forearms, on the mucous membrane of the mouth and throat. At first the bullæ were centralized and the epidermis broke spontaneously; each bulla, instead of healing, left an ulceration on its site; whitish elevations replaced the bullæ, assuming an irregular, washy appearance, and becoming surrounded by a zone of minute bullæ; the fresh bullæ have formed also on the mucous membrane of the lips, mouth, and pharynx. The case of skin affection was acute; the nodular condylomatous growths continue to appear. The patient has become gradually weaker, local application of paste of salicylic acid (ten per cent) and prolonged soda baths producing no amelioration.

SUCCESSFUL REMOVAL OF A HYDATID CYST PRESSING ON THE MOTOR REGION.—Dr. Graham and Mr. Clubbe report an interesting case of severe brain lesion successfully treated by operation. The case was that of a youth, aged sixteen years, whose previous history showed no serious illness. At ten years of age, however, he was unconscious for two days, apparently from cerebral laceration after a fall. At the beginning of the present year his memory gradually failed, and in addition to suffering

from giddiness and sickness he gradually became blind in the left eye. Weakness in both legs next appeared, and right brachiooplegia. On admission to the Prince Alfred Hospital, under Dr. Graham, both disks showed post-neuritic atrophy. He was treated with large doses of bromide and iodide of potash, and improved very much in motor power. However, he had a fit, after which the right hemiplegia was much worse, and stupor began. Exposure of the arm area in the left hemisphere by trephining was then performed by Mr. Clubbe, and a hydatid cyst removed, having been found to be simply pressing on the "motor" area. The wound was closed, and healed by the first intention. There was some subsequent oozing of cerebro-spinal fluid, owing, perhaps, to the employment of a drainage tube, but the patient made an excellent recovery, and has now regained the lost power. Unfortunately the operation was performed too late to prevent atrophy, and so the patient, it is to be feared, is permanently blind. In every respect, however, the case is a most valuable contribution to the literature both of cerebral surgery and of hydatid disease.—*Australasian Medical Gazette*.

THIOL IN SKIN DISEASES.—Prof E. Schwimmer, Buda-Pesth, is cited in the *British Journal of Dermatology*, September, 1890, as recommending thiol as useful in erythema, dermatitis herpetiformis, herpes zoster, acne rosacea, acne vulgaris faciei, in papular and weeping eczema, as also in the treatment of burns, etc. It is generally applied in the strength of a one-in-three aqueous solution. Professor Schwimmer was especially struck by the exceedingly satisfactory results he obtained with it in the treatment of herpes zoster and dermatitis herpetiformis. Of the latter disease a case had been ineffectually treated for three months with other remedies, but healed promptly in the course of a week, when thiol was applied. The patient was painted regularly twice daily with the solution for two or three days, and the skin then carefully washed with pure water. It was found that the vesicles and bullæ had disappeared even in this short space of time, being replaced by scurfs of thiol, and the skin below showed nothing but a moderate pigmentation. A result like this appears really marvelous in such a refractory disease as dermatitis herpetiformis. In erythema exudativum multiforme also good results were obtained with the solution, but the thiolum siccum pulveratum seemed preferable, the eruption becoming much paler in three to six days, and soon healing completely. The liquid form again proved more adapted to papular eczema, being espe-

cially cleanly in application. On the whole, thiol does not soil much, though the ointment form (made of two parts of thiol and twenty parts of lard) is not quite so agreeable as the solution. Its great advantage over ichthyol is, however, the absence of all unpleasant odor.

A CASE OF NEURITIS OF THE VISCERA.—There is perhaps no field of medicine in which greater difficulties are to be found than in dealing with some of the cases of obscure and persistent pain as it is often met with in the abdominal region. Much has been written on the subject of visceral neuralgia, its causes and treatment, but nothing on the condition of visceral neuritis. On the subject of multiple neuritis there is now a good deal of literature. Some valuable work has been done by Leyden, Buzzard, Seguin, Dana, Gowers, and I may mention several articles by myself in "Peripheral Paraplegia," "Ascending Paralysis," "Pseudo-Tabes," etc. This case I am now dealing with happened last winter during the epidemic of *la grippe*. A short time after the attack of influenza had passed off, the patient, a lady in her fortieth year, began to complain of paroxysms of pain of a most agonizing character. These attacks might occur at any hour in the day, but were generally most likely and most severe toward morning. Despite all efforts to relieve the patient, the case gradually grew worse, and she died after a period of great suffering lasting ten weeks.

The examination of the nerves and ganglia throughout the abdomen showed them to be in a highly inflamed condition. Under the microscope there was marked degeneration in some of the nerve tissue.

Here we have a sufficient explanation of the violence of the pain suffered, and of the stubborn and incurable nature of the illness. There is no reason why there may not be an attack of neuritis affecting the viscera, causing some of the obscure cases we meet with. Neuritis of the peripheral nerves is now a well established condition. It is hoped that this case may induce others to look for examples of neuritis in the abdominal and thoracic cavities.—*John Ferguson, M. D., in Alienist and Neurologist.*

THE BACILLUS OF PURULENT URINE—Some experiments have been made in the laboratory of Professor Strauss, in Paris, by Dr. Krogius, on the puriform urine of ten patients suffering from chronic stricture, with catarrh of the bladder and pyelo-nephritis. In one of these cases a bacillus was found of rather polymorphous appearance, resembling a small mobile pencil with rounded ends. The bacillus was from 1.8 μ to 3.6 μ in length, with a breadth equal to one

third of its length. When cultivated the length became considerable, but it developed no spores. It was easily dyed by aniline, but with equal facility decolorized by Gram's method, and it liquefied gelatine. At a high temperature it developed most peculiar colonies. They were distinguished by a strong characteristic odor resembling that of purulent urine. The development of ammonia was very marked. The bacillus very quickly decomposes urea into carbonate of ammonia and water. When newly cultivated and injected in doses of half a cubic centimeter into the subcutaneous connective tissue, veins, or peritoneum of rabbits, it often caused death in two hours, and never took more than two days to act fatally. Older bacilli are still more poisonous. The puncture shows first edema and redness, and then the epidermis becomes gangrenous, with an ammoniacal odor. The animals themselves are, in a few hours after the injection, in a state of high fever, prostrated, and suffering from profuse diarrhea, and ultimately coma comes on, during which they sometimes die in convulsions. The bacillus is called by the author "*Liquefaciens septicus*."—*The Lancet.*

SALICYLIC ACID IN THE TREATMENT OF SKIN DISEASES.—Dr. Cbas. Szadek, of Kieff, reports the results of external administration of salicylic acid in some skin affections. This medicament was first proposed by Wagner as a remedy in eczema. The author says that salicylic acid is a very useful drug in conditions in which we have an abnormally soft, thin cuticle and new formations of the skin, in inflammatory process of the skin with hyperkeratosis, and in various parakeratoses. The drug is of great value in several forms of eczema of long standing; it is also a good remedy for corns, warts, psoriasis, lichen planus. The author has found also excellent results to follow its use in parasitic affections of the skin (eczema, marginatum, ringworm, favus) and in hyperdrosis, whether of the feet or hands. In eczema impetiginosum of children the author uses the following: Acid. salicyl, 3ss; β vaselin, 5i; oxide zinci, amyli puri, aa, 3vi. M. f. pasta. In the removal of the verrucous callus and old psoriasis plaques a ten to twenty-per-cent ointment of salicylic acid yields good results. In cases of eczema inveteratum of the leg the author derives great benefit from a three-per-cent salicylic plaster. In psoriasis he recommends a ten-per-cent alcoholic solution of salicylic acid.—*Internat. Klinische Rundschau.* 1889, 23.

REUNION OF CUT-OFF TONGUE.—Dr. N. C. Davis, of Good Thupder, Minn., in September,

1884, was summoned to see a boy seven years of age who had been kicked by a horse on the right cheek, breaking off the first bicuspid tooth. The tongue was cut entirely off at the junction of the tip with the base, or the posterior portion of the frenum linguæ, with the exception of a few fibers of the tongue and mucous membrane on the right side. When Dr. Davis arrived, the end of the tongue was protruding from the mouth. The hemorrhage was controlled by a dilute solution of persulphate of iron. Dr. Davis drew the base of the tongue forward with a tenaculum. Then the apex was brought into apposition with the base, and secured by five silk ligatures above on the dorsum and seven below. The boy stood the operation well, and the hemorrhage was trivial. The balance of the treatment consisted in syringing out the mouth twice daily with a solution of boracic acid and putting patient upon a liquid diet. The tongue healed nicely, with the exception of a small portion on the left side, which sloughed out and left a small notch, which was nearly replaced by granulation. The doctor discharged the patient in about three weeks, with the tongue full length and articulation good.—*Northwestern Medical Journal*.

CHRYSOPHANIC ACID IN ACNE.—Dr. Metcalf highly recommends this agent in acne. He says he has not failed to cure perfectly any case in which the treatment has been adopted. The face is to be washed with soap and well dried at night. Before retiring, the parts in which the acne is are to be well rubbed with an ointment of three grains of the acid to the ounce of vaseline, and this is repeated nightly until a sharp inflammation of the skin ensues. The inunction is then omitted until the dermatitis is gone, when it is repeated. In most cases a three-grain ointment is of sufficient strength, but occasionally the strength is to be increased up to five grains to the ounce, or even more. The patients are to be cautioned about the staining of their fingers and clothes, and to guard their eyes.—*Canada Lancet*.

KERATIN.—Drs. Unna and Beiersdorff recommend that pills coated with keratin, or capsules made of this substance, should be employed when drugs are prescribed which irritate the gastric mucous membrane, and the administration of which is liable to induce vomiting—such as preparations of digitalis and squills, salicylic acid, or iodide of iron; also when substances are given which neutralize the acidity of the stomach, or which in any way impair its activity—such as acetate of lead, tannin, nitrate of silver, alkalis, etc. An outer coating of keratin is also desirable when

prescribing drugs that are required to act on the intestinal mucous membrane without affecting that of the stomach, such as extract of logwood, tannin, or the salts of aluminium. Finally, keratin is most valuable when substances are given with the object of destroying worms, but which, if introduced in the ordinary way into the stomach, undergo absorption to such an extent that they are liable to set up alarming symptoms, while at the same time their vermifugal action is reduced. Keratin is obtained by treating shavings of buffalo horn with ether, alcohol, and an acid. Its special property is that it is insoluble in the contents of the stomach, but readily so in those of the intestine after the pancreatic juice has entered. *London Lancet*.

SULPHONAL IN CHOREA.—The notable improvement in many cases of chorea during the administration of sedatives, such as chloral or bromide of potassium, has long been recognized by the profession. Dr. J. A. Jeffries has recently published (*Medical News*, Philadelphia) his experience with sulphonal. Five of his cases were simple chorea—that is, first attacks of recent origin. These all recovered within three weeks. In two arsenic had failed, in two it was never used, in the fifth either arsenic or sulphonal alone failed, but together they were quickly followed by improvement. Sulphonal was also employed in five other cases, which were either of long standing or second or third attacks; four were at the period of puberty. Three of these cases got well, at least for a month; in three arsenic had failed; in two it was not used. Two did not recover with any treatment. All the cases were also ordered a daily sponge bath, simple diet, and sleep in the middle of the day. Although the treatment has only been employed in ten cases, and two of these have shown no improvement, the results in the other cases appear sufficiently encouraging. In reports upon simple chorea, however, it is well to check the results by the average duration of such cases when not under medicinal treatment.

STYRONE IN OTITIS MEDIA.—Dr. Cheltsoff strongly recommends the employment of a solution of styrene in chronic inflammation of the middle ear. Two forms of styrene exist, both, of course, having the same formula, $C_8H_{10}O$; one consists of acicular crystals, melting at 33° C. and dissolving readily in ether and alcohol; the other, which is cheaper, is a yellowish liquid with an acrid taste, insoluble in water, but readily soluble in ether and alcohol. It is this latter form that Dr. Cheltsoff has used. He orders a solution of the strength of about a

dram to four ounces of spirit, of which from two to four teaspoonfuls are directed to be mixed with a tumbler of warm water for each syringing. The operation should be repeated two or three times a day. Styrene being both strongly disinfectant and deodorant, as well as somewhat analgesic, the secretion soon diminishes and becomes less unpleasant; besides which the pain, if present, is ameliorated. No irritation is produced as when many other substances are used in sufficiently strong solutions to destroy the micro-organisms present in the secretion.—*London Lancet*.

INFANTILE CONVULSIONS.—Dr. Jacobi first orders a purgative dose of calomel, and then follows in a few hours by:

Chloral hydrat.gr. iv;
 Potas. bromid.gr. viij;
 Aque, }
 Syrupi, } āā f 3 j.

Sig. One dose for a child two years old.

VOMITING OF PREGNANCY.—Prof. Goodell, of Philadelphia, recommends the following:

Cerri oxalat.gr. j;
 Ipecacuanhæ.gr. j;
 Creasoti.gtt. ij.

Sig. This is to be taken every hour until nausea is controlled.

CAFFEINE IN PNEUMONIA.—Te Gempt claims that the use of caffeine is indicated in the course of acute fibrinous pneumonia when the heart begins to be enfeebled, the blood pressure of the aortic system lowered, or when the pulse becomes unusually frequent or irregular. The use of the drug should be begun before symptoms of collapse appear. It should be used at the beginning of the disease in debilitated persons, drinkers, old people, and in subjects of cardiac disease. When used at the proper time and in sufficient doses, it diminishes the frequency of the pulse and of the respiration, and increases arterial pressure, lowers temperature, and produces a sensation of well-being. After the period of apyrexia it is unnecessary to continue its administration.—*Revue des Sci. Med.*

ALCOHOL CIRRHOSIS IN A CHILD.—Dr. H. M. Biggs has very recently presented before the New York Pathological Society a specimen of advanced cirrhosis of the liver obtained by him at the autopsy of a boy aged only thirteen years, whose body also presented all the other usual lesions of chronic alcoholism. It was reported to Dr. Biggs that when the deceased was a baby of two years old he had

a bronchitis, for which whisky was prescribed. As the child seemed to take a liking to the latter, his parents permitted him to gratify his taste for it without let or hindrance, and during recent years they had given him money to spend for alcoholic drink. His capacity for disposing of alcohol became so increased that he would take from six to eight drinks of whisky each day, of about one and one half ounce to each beverage. On the day of his death he bought a larger quantity than usual and took it all at one drink. He was found semi-comatose some hours later, and never rallied. At the *post-mortem* examination the liver and other organs presented nearly the same pathological appearances that mark alcoholic saturation in the adult.

ANTIDOTE FOR STRYCHNIA.—At the British Pharmaceutical Conference, September 2, 1890, Mr. Siebold made a verbal communication regarding the antidotes of strychnine.

In this he explained, as stated in the *Chemist and Druggist*, September 6, 1890, that he had taken fifteen-minim doses of liquor strychniæ, sufficient to produce contraction of the terminal muscles, and had followed the doses, as soon as the symptoms appeared, and sometimes before, with doses of the various antidotes. Tannin in ten-grain doses was perfectly valueless. Charcoal in one-ounce doses did have some effect, but not much; whereas chloral hydrate and chloroform sufficed to entirely prevent the muscular contractions if taken in time, and injections of morphia were also useful.

ALETIS AS A CATHARTIC.—*Aletis farinosa* belongs to the family of the Hemodoraceæ conostyleæ. Its rhizome is administered in the form of a powder in doses of nine grains as a simple, bitter tonic. In larger doses it seems to possess cathartic, emetic, and even narcotic properties. Good results have been obtained in colic dropsy and chronic rheumatism by its administration.—*Journal de Médecine*.

"SO MUCH A FOOT."—A bran new graduate, fresh from the parting embraces of his *alma mater*, was called to attend an old lady suffering from tape-worm. Having relieved her of the parasite, he sent in an account for 10s. 6d., which the patient thought exorbitant and asked for particulars. These were given in the following terms: "For delivering you of a tape-worm 10½ feet long, at a shilling a foot, 10s. 6d."—*Medical Press*.

DR. ALFRED VOGEL, of Munich, well known for his work on Children's Diseases, died October 9th, in his sixty-first year.

The American Practitioner and News

"NEC TENUI PENNĀ."

Vol. X. SATURDAY, DECEMBER 20, 1890. No. 13.

D. W. YANDELL, M. D., }
H. A. COTTELL, M. D., } - - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price \$3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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CONSUMPTION CURE.

Koch's method of treating tuberculosis continues to make abundant copy for the printers of medical journals at home and abroad. Nevertheless the subject remains *in statu quo*. The composition of the lymph is only a matter of guess work, while those who have become the happy possessors of it are able only to say that the treatment appears to have something in it; but what, can only be unfolded by time. In Germany, in England, and in America, injections are daily made at the leading hospitals with results that justify the modest claims of the great discoverer, but to date do no more. Lupus is apparently cured in a few weeks. Facts of diagnostic value are being gleaned with reference to incipient phthisis; but whether the lymph will give those predisposed by heredity immunity of the disease, or make any permanent impression for good upon old cases of pulmonary consumption, no one can say.

It is to be regretted that the secret of the composition of the lymph is still withheld from the profession, since the absence of the knowledge of the nature of the substance used will make a bad hiatus in every study of its therapy in phthisis.

The rush to Berlin has abated somewhat,

but not sufficiently, it is said, for Koch to come out of his laboratory, into which he retired with his secret when he discovered that he was pressed for elbow room.

While it is to be hoped that this retirement will result in a new and adequate supply of the precious lymph, we trust that none of it will get into private practice till its uses and abuses have been thoroughly put to the test in hospital practice. Meanwhile the orators, philosophers, and philanthropists continue to effuse, effervesce, and corruscate over what seems to be the greatest therapeutic new departure of the ages.

DR. ROBERTS BARTHOLOW.

In a recent issue of this journal we devoted a two or three line paragraph to the retirement of Dr. Bartholow from the faculty of Jefferson Medical College. The source of our information was a news item which was then going the rounds of the press. It seems that the item implied more than the truth concerning the event, and we are therefore only too happy to publish the following letter from the great therapist. It is clearly to the point. Be matters as they may in the East, Dr. Bartholow's many friends, students, and admirers in the West will be delighted to learn that he is well and likely to continue his valuable labors for truth in medicine:

To the Editors of the American Practitioner and News:

In the current issue of your journal I have just seen a news note in which my retirement from the Jefferson Medical College is spoken of in a manner which has been assumed by a friend of mine in giving an account of the transaction to other journals, professional and lay. A peculiar color is thereby imparted to my retirement, by which one may recognize the friendly act that speeds "the parting guest," and that would save to his friend any wrong construction which malice or envy might apply to the event.

In this note it is said that Dr. Bartholow is "incapacitated" by over-work for further service.

Now, let me assure you and all others having any interest in my affairs that I am not broken down either mentally or physically, and never was in a condition better fitted to discharge my professorial duties or my professional work. Those who have been willing to do me good as if by violence had

not only a friendly interest in my welfare, but other interests, probably, to be subserved by my retirement.

It is to be hoped that Time, who always deals in a faithful manner with Truth, will in this instance also bring the real facts to light, and show that Dr. Bartholow is *not* "incapacitated" for the performance of his duties in Jefferson Medical College.

ROBERTS BARTHOLOW.

PHILADELPHIA, Dec. 19, 1890.

Notes and Queries.

STOMATITIS; DIARRHEA IN INFANTS. (A CLINICAL LECTURE.)—*Stomatitis.* The first case I show you to-day illustrates a disease which is frequently seen in children, but generally in those not so far advanced in age as is this boy. It is a case of ulcerative stomatitis, so called. Stomatitis is a very important disease, affecting, as it does, at one period of life, almost every child, producing at times very serious systemic disturbances, and occasioning considerable anxiety on the part of the parents. It may also at times produce reflex nervous trouble, such as a slight spasm. This affection has been divided into different classes by various authors, all of whom appear to confound more or less the various forms.

Catarrhal Stomatitis. According to the best authorities, the simplest form of stomatitis is the catarrhal form. This amounts to nothing more than a simple hyperemia of the entire mucous membrane of the mouth, which may extend to that of the pharynx, and perhaps down to the esophagus, or at times even through the entire alimentary canal. It corresponds to an acute cold in the head, so far as the pathological changes in the mucous membrane are concerned. Under these circumstances we are generally called to see the child because it has stopped nursing, or, if it be older, because it complains of a sensation of heat in the mouth, attended with a great deal of slobbering, and associated with crying and a constant moving of the hand to the mouth. Occasionally there is a slight febrile movement. Upon placing the finger in the mouth it is found to be hot to the touch and inflamed. This is probably due to the fact that there is an in-

creased hyperemia, and consequently an increased local temperature. This is the simplest and mildest form of the disease. A little care devoted to the cleansing of the nipple, or regulating the diet, together with the use of some febrifuge mixture, such as the citrate of potassium and water, will relieve the child in a few hours, unless the attack be so severe as to bring out the aphthous form or the mild ulcerative form.

Aphthous Stomatitis. Aphthous stomatitis is really in one sense an ulcerative stomatitis, and yet it is not called so in the text-books. It is a stomatitis in which the catarrhal process has been so severe, particularly about the mucous follicles, that it has resulted in the death in small spots of the epithelium of the tongue and buccal mucous membrane. Small, superficial ulcerations are formed, without any induration around their bases, and are not excavated—a form, practically, of a very mild ulcerative stomatitis. Aphthous stomatitis has been confounded by many writers with thrush. When a child comes to you with white, raised spots upon the tongue, that is thrush; if, instead, there are simple ulcerations upon the tongue, that is aphtha. In aphthous stomatitis, or "baby's sore mouth," as it is frequently called, the child loses its appetite, has a high fever, sooner or later develops diarrhea or obstinate constipation, and may present severe nervous symptoms, twitchings of the muscles, and turning in of the thumbs. This condition requires careful treatment. It should be watched closely. A mixture may be prescribed containing:

Potass. chlorat.....ʒss-i;
Tinct. myrrhæ.....gtt. v-x;
Elixir. calisayæf ʒ iii.

M. S. One teaspoonful every three or four hours.

As a rule, children do not object to this mixture, since it is agreeable to the taste. Why do I give this? Because the chlorate of potassium is eliminated chiefly by the salivary glands, thereby bathing the mucous membranes with medicated saliva, and it is practically impossible to make a local application to the sore spots in young children. As a rule, marked relief speedily follows the use of such a pre-

scription. One contra-indication only exists, and that is any acute renal inflammation, which, however, is a rare condition in childhood, unless it follows an acute disease. In such cases we must resort to other treatment or use the chlorate in very small doses.

Ulcerative Stomatitis. We now come to what is known as the true ulcerative stomatitis; and this is a disease which, in severity, greatly surpasses aphthous stomatitis. It is accompanied by the formation of pocketed ulcerations over the mucous membrane of the mouth, depressed, serpiginous, with crater-like edges and yellow bases, surrounded by induration, and often confluent, spreading over the lips and even down upon the chin in bad cases. There is a constant dribbling of saliva in all forms, wetting the skin of the chest. This is frequently followed by an eruption of eczema over the chest and abdomen. The nasal mucous membrane becomes involved in the process, and the nostrils are stopped up, resulting in breathing through the mouth. This causes the tongue to become as dry and scaly as it does in typhoid fever. Here the local treatment is identical with that in the other varieties. If the child is old enough, the ulcerations should be touched up with the stick of silver nitrate or a strong solution of the same salt. The stronger solutions hurt less than do the weak, and a solution containing from twenty to thirty grains to the ounce is the best for this purpose. It should be applied with a camel's hair brush, care being taken that the brush is not dripping wet. All that is necessary is to moisten the surface of the ulcers. At times a little cocaine may be used, but generally the burning of the cocaine is worse than that of the silver, and we thus use two medications instead of one. Fever mixtures of various kinds are wanted. Particular attention should be paid to the bowels and kidneys. The urine is always found to be concentrated, and it is not only well to use the chlorate of potassium solution already named, but it is also wise to order Vichy or some other mineral water, which will act upon the liver and at the same time wash out of the kidneys the potassium products and lower the specific gravity of the urine.

Noma—Cancerum Oris. We now advance to

another form of ulceration of the mouth, known as cancerum oris, or noma, which is practically not a stomatitis. We might say that this is an invariably fatal condition. Perforating ulcers appear upon the mucous membrane, going on to gangrene, causing sloughing away of the cheeks, so that the inferior maxilla is exposed. It is accompanied by great loss of flesh, wasting, high fever, cachexia, and rapid death. It is a very rare condition in this country, and is probably due to some micro-organism not yet identified. We may use a supporting treatment and apply silver nitrate and other caustics locally, but death usually follows.

This boy has the ordinary mild stomatitis, a little too severe for aphtha, and too mild for the ulcerative form. In some cases of the aphthous and milder ulcerative varieties, and always in the severe forms, the systemic depression that is produced is simply appalling. Within twenty-four hours the child will sink into a complete collapse. Many English writers consequently believe that alcohol should always be used in these cases, and this is a matter it will be well to bear in mind.

You will find among nurses, and particularly monthly nurses, that they always assert that this disease is bound to "go through" the child. Practically this is so. I hardly ever see a case of stomatitis which is not followed by a catarrh of the bowels and stomach, and the patient is usually ill at least ten days. In such cases, as soon as the diarrhea becomes excessive, some astringent mixture may be given. But do not check such a diarrhea too rapidly, or serious consequences may follow, and even convulsions in young infants. Purgative or aromatic sulphuric acid are best for this purpose, their use being stopped as soon as the stools are reduced to two or three in the day.

Thrush. I have passed over the condition known as thrush, which is often incorrectly called "baby's sore mouth." Thrush is an entirely different disease, due to the presence in the mouth of *saccharomyces albicans*. It is due to a fungus, and differs from aphthous stomatitis in the fact that it grows from the surface like tufts of mold. Its size varies from that of a pin's head to that of a small finger nail. Thrush is found upon the tip and edges of the tongue,

as a rule. Practically it presents the same symptoms as does stomatitis; a hot mouth, dribbling, inability to take food on account of the severe pain, although the child is intensely hungry. This is one reason why collapse is so frequent in stomatitis. If the child is old enough to take a mouth-wash, give it a mild carbolized solution, say a one-per-cent solution of the crystalized carbolic acid, washing the mouth every two or three hours. The chlorate of potassium is not as useful here as in stomatitis. The carbolic acid is more of an antiseptic, and hence is more serviceable. Thrush rarely extends down through the alimentary canal. Some clinical authorities say they have found the fungus in the stomach, and even in the small intestines; but this is very rare.

The boy I showed you with the ulcerations around the edge of each tooth has a condition somewhat different from the ordinary stomatitis, in the fact that the ulceration has extended to the gums. It is comparatively rare for this to occur. I do not know what he received from the dispensary. He came in on Saturday for the first time, and is better since using his mouth-wash. An excellent remedy to use as a wash is the sulpho-carbolic acid of sodium, five to ten grains to the ounce. This is perfectly innocuous, thus having an advantage over carbolic acid.

One word as to the diet in these cases. Parents always want to know about the diet. This is a very important matter. We can not cure our patients unless it is attended to. Do not give any thing which contains sugar. Cut down the sweetening of the bottle, or use instead a small amount of saccharine. For an older child, order broths, thin, non-greasy soups, and largely a milk diet, washing out the mouth with an antiseptic wash after each meal.

Serous Diarrhea. The baby I now show you is three months old, and has had a watery diarrhea for the past two weeks, attended with but little pain, the child crying only occasionally. This is generally the case with a watery diarrhea. In mucous diarrhea we nearly always have tenesmus and pain. The child has been fed upon condensed milk, one part to sixteen of water, ever since its birth until last

Saturday, when it was ordered cow's milk. Undoubtedly this attack the child is suffering from is due to the use of improper food. It was getting condensed milk instead of human or cow's milk. This is one class of cases in which we are apt to meet with thrush.

Mucous Diarrhea. The first case of mucous diarrhea in children will puzzle you? It must be controlled; but how can this be done? The first thing is to remove the cause, and then to cure the condition produced by the cause. The mother now tells me that the baby has some green in its stools. This does not generally occur in serous diarrhea. The presence of green usually indicates a mucous and not a serous diarrhea. These green spinach stools of young children are always due to fermentation, and we rarely have fermentation when we have a serous diarrhea. A small, indigestible particle of food lying in the intestinal canal produces an irritation of the mucous membrane and consequent depression of vitality. A gradually spreading catarrh is produced with a mucous secretion, thick and tenacious, which coats the particles of food. These are then rolled along in the canal until finally the child has in its alimentary canal a decomposing piece of milk or meat covered with mucous which can not be digested. Active inflammation is set up, and fermentation follows, accompanied with the growth of a fungus. These passages are nearly always acid, instead of being alkaline. Should you give the child an astringent mixture now, you will do it harm. Nature is trying to relieve the child by washing the irritating substance out. Something must be given to clear out the alimentary canal. The best thing is a dose of castor oil, a soothing purge, taking five hours to act, and facilitating the discharge of the immense amount of mucus thrown out in the alimentary canal. Then administer the stringent mixture. If the child has a puffy, distended belly, indicating a chronic condition, follow the purge with tonics and alkalis. A mixture of bicarbonate of sodium and gentian is the best remedy for such cases. This primary purgative treatment will occasionally be objected to by the parents, and then it must be explained. If we are compelled to give an astringent, one of the best for

a young baby is chalk mixture. This, however, is hard to swallow, and it may be better to give one half or one drop of aromatic sulphuric acid to a child of six months or one year, combined with syrup of ginger, elixir curaçoa, or other adjuvant, to render it palatable. A mixture of bicarbonate of soda, forty-eight grains to a dram, in six ounces of compound infusion of gentian is an excellent preparation, given in dessertspoonful doses. If the compound tincture of gentian is used, the dose must be less. The only objection to this is its bitter taste, but this may be overcome by administering a peppermint cream drop before and after giving the dose. The condition of acidity of the alimentary canal is overcome by the alkali, while the compound tincture of gentian is a tonic, overcoming the depression which results from the primary irritation and inflammation.—*Dr. H. A. Hare, in Medical and Surgical Reporter.*

KOCH'S DISCOVERY.—That intense excitement is invariably followed by a corresponding depression was never more clearly brought out than in the events of the last few weeks, and the unreasoning because too excited and too sudden jubilation of the medical world has been followed, or is being followed, by an equally irrational reaction which has taken the form of every thing that can be urged, either probable or improbable, against Koch in the first instance, and against his new method in the second. Statements that Koch never made are vigorously contradicted, and results which he never claimed are as forcibly denied. All this is to be greatly deplored, as either exultation or depression of a hysterical nature in the medical profession must necessarily be reflected in an intensified form in the minds of those poor patients suffering from tuberculous affections, the hopes of many of whom have only been raised to be unnecessarily shattered.

We were assured at first that tuberculosis was about to become a disease of the past, that Koch's new method was to annihilate the tubercle bacillus, while now we are assured that Koch has done nothing new, and that he is simply working out Pasteur's ideas. Let us discuss calmly the present position of affairs.

Koch, like all scientific men, has his own methods of working and his own system of declaring his results. He has never yet rushed into print with a discovery until he has been sure of his facts, and all who are in any way acquainted with the circumstances under which Koch was practically compelled by his Government superiors and by his colleagues to make his premature statement at the International Medical Congress in Berlin will sympathize most deeply with him that he was compelled to break through his usual reticence. As we have already pointed out, it is evident from the carefully written statement that he made on November 14th that even this was wrung from him by his desire to counteract in some measure the effects of the indiscreet ardor of his friends and disciples, and to correct the misleading statements that have from time to time appeared in the press, and so to lay before his medical *confrères* his exact position in regard to his new discovery, and to correct some of the erroneous impressions that were gradually gaining ground, not only among those who had charge of phthisical patients, but among phthisical patients themselves.

Koch has made a most marvelous discovery, one which in many respects is on absolutely new lines; but, with the modesty which should characterize all scientific workers, he distinctly warns those suffering from phthisis that they must not raise to too high a pitch their hopes of being benefited by it; for, although he states very clearly and very distinctly his belief that he has been able to obtain a material which, when injected into the human subject, brings about the disintegration or degeneration of any tissue that forms a nidus for tubercle bacilli, neither he nor any other can restore the normal tissue that is lost; he can localize the diseased patches, but he can not restore them to life. This new method of treatment depends not upon the fact that the patients become accustomed to the action of the poison produced by the tubercle bacillus (though this also seems to be effected), but rather to the fact that the diseased area is so sharply defined by the reaction set up on the introduction of the lymph that the tuberculous area practically becomes encapsuled. Bacilli are confined to this area,

and the whole mass may be removed. The era of surgical interference with tuberculous masses may be said to have dawned should it be found on further experience that the separation of the dead from the living tissues is as distinctly brought about as Koch seems to have proved.

Let us see how far Koch really goes, and how far ordinary pathological explanation may be brought in to support his position. As regards lupus, he has not the slightest doubt as to the ultimate success of his treatment. After weekly injections for three or four weeks of full doses of the lymph at some distance from the ulcerating surface (usually in the back) the disease is practically cured, and cicatrization takes place, even in cases where the disease has been of several years' standing. The local changes that are set up point to the fact that the lymph acts immediately on the tubercular granulation tissue of which the surface of the ulcer is composed. The lupus spots begin to swell and to redden, showing that there is an increase of fluid in the blood-vessels, and probably also in the lymph spaces. This commences before the rigor, which is a characteristic feature in tubercular cases, sets in. During the fever that follows, the swelling and redness increase, and finally may become so marked that small brownish sloughs are formed as a result of the intense reaction, the tissues apparently dying before the eyes of the observer. In those cases where the lupus is sharply defined the central portion corresponding to the tubercular granulation tissue becomes swollen and brownish, eventually undergoing necrotic changes; surrounding this center is a whitish rim almost a centimeter wide, the exact nature of which is not evident, though one would expect to find that it consists of an edematous fibrous tissue area; while outside, again, is a broad band of bright-red inflammatory tissue (corresponding to the old hyperemic zone), in which there appears to be, from all accounts as yet received, an attempt made by the healthy tissues to still further localize the mischief. Should a similar series of changes take place in the tubercular areas of bones and joints, the question of operation, after the injection of the lymph has done its work, will of course be settled, and the same

will apply to glands or other tuberculous tissues that are accessible to the surgeon's knife. Indeed, in the present condition of cranial and abdominal surgery there can be almost no limit to the cases in which surgical interference may become applicable and necessary. Even in the lung, as has been pointed out by eminent surgeons, it will not be a very difficult matter to remove a localized mass of tubercle, or even a series of masses, when drainage of tuberculous cavities would be out of the question; while the treatment of tubercular empyema will be much shortened and very considerably simplified.

All thoughtful physicians will be inclined to take a more hopeful view of Koch's treatment from the fact that he does not disdain to call in the aid of those means which physicians up to the present have found to be most beneficial in the treatment of phthisical patients; fresh air, good nursing, and good food being all brought freely into requisition where possible. He claims for his lymph only the power of killing the weakened tissue, so removing the pabulum on which the tubercle bacilli depend for their existence, and he aims at so far strengthening the tissues of the body that they can withstand the attacks of bacilli that are driven out from the tuberculous areas by reason of scarcity of food.

There is one point to be borne in mind in all this. Koch formerly insisted that the reason no tubercle bacilli can, in many cases, be demonstrated in caseous areas, is, that as soon as the conditions have become somewhat unfavorable to the existence of the bacilli, spores are formed, and these, remaining in the caseous mass, may prove a fruitful source of infection for long periods after the bacilli have disappeared. It is for this reason that the danger of removing tuberculous masses by scraping and cutting has been insisted upon. If this danger be present, there will, in Koch's treatment, be two difficulties, which, doubtless, in time, will be removed, but which at present are deserving of careful attention. It will be necessary to make sure that the processes of necrosis and localization are complete, and the greatest care will have to be exercised, in the removal of these necrosed masses, not to disturb

the sequestrum in any way, and, so far as can be seen at present, "free but careful incision" will have to be the rule in dealing with them. Whether the thermo-cautery may not also come into greater requisition is a legitimate matter for speculation.

It would be idle, with the data at our disposal, to attempt to discuss the nature of the lymph; but, from the fact that the local and constitutional reactions are not set up in other cases where we have granulation tissue somewhat similar to tuberculous tissues, as in syphilis, for example, we must assume that the lymph does not necessarily act on all tissues of low vitality, and we are forced to the conclusion that Koch's lymph acts in conjunction with the products of tubercle bacilli in bringing about the rapid disintegration of the cells among which the tubercle bacilli lie, and that it compels, as it were, the activity of the tubercle poison to be exerted at once, and does not allow of its being transferred by lymphatic or other channels to tissues, even to those in the immediate neighborhood of the "sequestrum." It also assists in setting up the rapid local reactionary changes in the surrounding tissues, so bringing a sufficient number of active cells and fluids to deal with any bacilli that may escape, or with any poisons that have not been compelled to act in the caseating area. All this points to the fact that Koch is dealing with a soluble poison very similar in its nature (though perhaps modified) to that set free by the tubercle bacillus itself.

We shall, of course, shortly have more information. It behooves us, however, in the meantime, to keep an open mind and to confine our attention to Koch's own observations, and not accept the statements of enthusiastic disciples, who are apt in their ardor to raise false hopes in those in whom the "spes phthisica" is only too readily excited, or of those who have a constitutional prejudice against any thing that they do not fully understand. Koch holds out hopes of the cure of lupus, which he thinks will not recur; of tuberculous glands; of tuberculous joints, and of early phthisis where there is only slight cavity formation; even of laryngeal phthisis; of cases of tubercular meningitis; and of tubercular disease of others of the serous

membranes; but we can not be astonished that he despairs of being able to effect permanent cures in cases where there are large cavities in the lungs, or where secondary suppurative changes are helping in the disorganization of of the lung or other tissues. It is remarkable that the general or constitutional symptoms caused by the injection of the lymph are almost identical in character with those met with during the process of abscess formation; pain in the limbs, fatigue, inclination to cough, and difficulty in breathing, speedily followed by rigor, which lasts for some hours; sickness, vomiting, and a rise of temperature to 39.6°C .; then a fall of temperature, weakness, and lassitude, and later a return to the original condition. It would appear as though local changes in which death of the tissues takes place gave rise to these symptoms, just as in the process of localized suppuration where rapid death of the tissues takes place. The other local conditions are exactly the same as in acute suppuration, but the ultimate results, as we have seen, differ in a very marked degree. It is somewhat difficult to understand why the discharge from the lungs should return to a mucous condition, except in cases where the tuberculous infiltration has been exceedingly slight; but these probably are the cases to which Koch refers in his reports, as these are the cases which, certainly, are most suitable for treatment. If he is able to make good even a fraction of the promises that he has made, he must be looked upon as one of the greatest benefactors of suffering humanity that the world has seen.—*London Lancet*.

PURE SALICYLIC ACID.—Professor Dunstan's researches upon the chemistry of salicylic acid can not fail to be of interest to the medical profession, even though they do little more than confirm the ideas which have been previously arrived at from other considerations. The artificial acid has been long since assailed chemically and therapeutically by the late Mr. John Williams and by Professor Latham, while more recently its physiological action has been the subject of investigations by Professor Charteris. Mr. Williams discovered two impurities, and suggested that one of them might be cresyl-

salicylic acid. The specimens he obtained have been again examined for the purposes of Professor Dunstan's paper, and they have been found to be respectively ortho- and meta-cresotic acid. The curious fact about the first of these impurities is that its admixture with salicylic acid lowers the melting point considerably. Pure salicylic acid melts at 156.8°C ., and ortho-cresotic acid melts at 163°C ., but equal parts of each acid, crystallized from alcohol, gave crystals melting at 126°C . On employing the lime process for the purification of the ordinary salicylic acids, crystals were obtained which melted at 151°C ., and these proved to be a third variety of hydroxytoluic acid, which it is convenient to name paracresotic acid. Professor Charteris reports that a specimen of this substance exerts a marked toxic action when administered to animals. Professor Dunstan gave details of the various processes he has adopted for purifying the commercial acid. Some of these, although very efficacious, are inconveniently costly, an objection which does not apply to the employment of basic lead acetate or lead carbonate in presence of alcohol. In conclusion, it was urged that advantage should be taken of the approaching publication of an addendum to the British Pharmacopeia to include in it a description of "purified" or "pure salicylic acid," which alone should be employed for internal administration. This purified acid should be required to exist in separate well-defined prismatic crystals, melting between 156.5°C . and 157°C . Before the discussion which followed the reading of this paper at the Pharmaceutical Society, Professor Charteris gave details of his experiments with ortho-, meta-, and para-cresotic acids, and also offered short descriptions of *acidum salicylicum purificatum* and *sodii salicylas purificata* for insertion in the addendum of the British Pharmacopeia. To judge from Professor Atfield's remarks, it appears improbable that a second acid will be introduced, but possible that the various suggestions would receive due notice when another reprint of the Pharmacopeia should be required. During the discussion Mr. Helbing mentioned that paracresotate of soda had been recommended by Professor D  mme, of Berne,

as an antipyretic in 8 to 15 grain doses, and in his "Pharmacological Record" he has since published Demme's results at greater length. Assuming the identity of the acid he employed with that separated by Professor Dunstan (the melting point is the same), the supposed toxic action appears to call for further investigation. *London Lancet*.

CREMATION FROM A RELIGIOUS POINT OF VIEW.—Whatever objections have been urged against the practice of cremation have, it must be admitted, little if any foundation in religious principle as expressed in Scripture. Ecclesiastical doctrine finds no valid objection to the practice. Inspired by no such instinct as that which caused the Egyptian to preserve, in hope of an actual revival of its present atoms, the perishing body, and still less by any chimera which would hold that the soul is imprisoned in the decay of its former home, it leaves unrestricted the wide sanctions of Holy Writ. As far as religion goes, indeed, there is not even apparent an attempt to discountenance cremation, unless it be taken to be shown by passive refusal and contrary preference. The example of early times under which the owners of the most venerated names were laid in the earth from which they arose, has guided this preference, the existence of which is evident. The sentiment is a worthy one. Nothing can be gained by seeking to crush it, nor is there anywhere a desire to do this. It need not imply opposition to the proved necessities of sanitary existence, not even to cremation if in any case capable of such proof, and its free exercise under wholesome conditions remains as much a common right as the liberty to burn where the cause of death can be clearly shown.—*London Lancet*.

MEDICAL ACHIEVEMENTS IN CHINA.—Dr. Kerr, a medical missionary at Canton, has in the past thirty-six years treated over 520,000 patients, and has prepared twenty-seven medical and surgical books. He has trained one hundred medical assistants, chiefly Chinese. China now possesses one hundred and four hospitals and dispensaries, at which in 1889 more than 348,000 patients received treatment.

